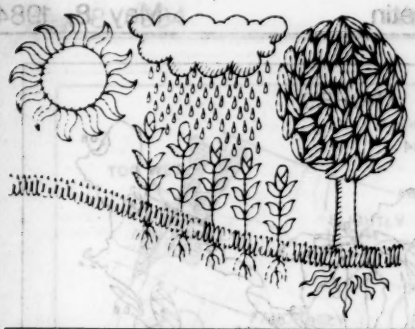
C 55.209: 71/18 Engin 273-D12



WEEKLY WEATHER AND CROP BULLETIN

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration, National Weather Service

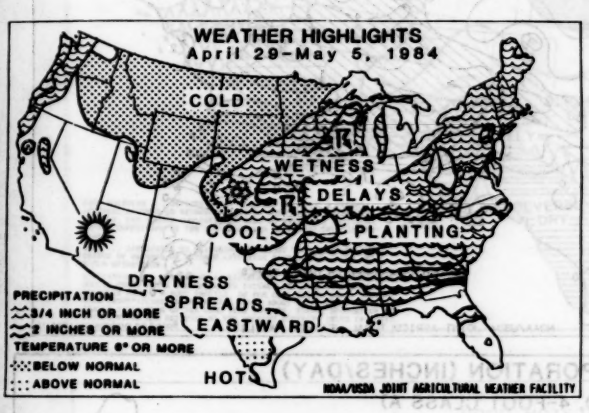
U.S. DEPARTMENT OF AGRICULTURE
Statistical Reporting Service and World Agricultural Outlook Board

Volume 71, No. 18 WASHINGTON, D.C. May 8, 1984

The University of Michigan Engineering Library
THE UNIVERSITY OF MICHIGAN JUN 1 1984 ENGINEERING

National Weather Summary

April 29 to May 5



HIGHLIGHTS: Rain covered the Northwest from central California through Washington, while snow--some heavy amounts--fell throughout the northern Plateau and Rockies and central Rockies. Showers and thunderstorms covered most of the area east of the Rockies. Only the Southwest and southern Texas were completely dry. Tornadoes hit in parts of the central Plains and were frequent and devastating from southern Arkansas into Georgia and South Carolina. Unusually hot weather set temperature records in central and southern Texas, further exacerbating dry weather there.

SUNDAY...Showers and thunderstorms covered the area from the central Plains to upper Michigan. Heavy douwnpours of rain and a few tornadoes were reported in the eastern portion of the central Plains and through Iowa and southern Wisconsin. Heavy rain also fell in central Tennessee and western Kentucky. Lighter showers spread into the lower Mississippi Valley and to the central Appalachians.

MONDAY...Much colder air moved over the central and northern Plains. Light showers covered all of the East Coast States to Georgia and across the South to southeastern Texas. Another Pacific storm spread rain along the northwest coast and snow over the central Plateau and northern Rockies. Some snow fell in western Nebraska and Kansas.

TUESDAY...Temperatures warmed over the central Plains but were still below freezing in the morning over the northern Plains and upper Lakes area. Thunderstorms broke out from Georgia to northeastern Texas and showers spread northward to South Dakota. Rain fell over the Northwest coast, and snow fell over the Plateau and Mountains.

WEDNESDAY...A warm front across the Southeast spawned tornadoes, thunderstorms, and heavy rain from southern Arkansas to the Carolinas. Severe weather was more widely scattered in the central Plains from Oklahoma through Nebraska. Very hot weather spread through southern Texas.

THURSDAY...Severe thunderstorms continued to rumble across the southeastern States. Dozens of tornadoes were reported. Showers and thunderstorms prevailed from the mid-Mississippi Valley through the Ohio and Tennessee Valleys to southern New England. Hot weather continued in southern Texas.

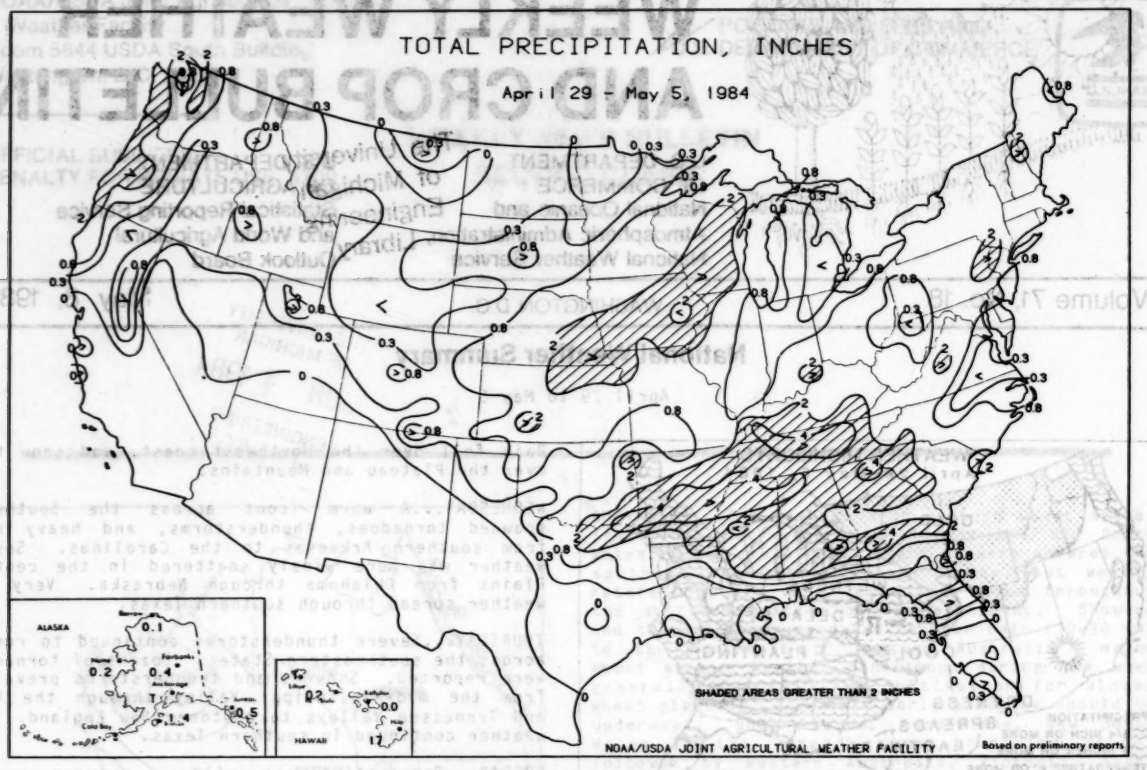
FRIDAY...Comparatively mild showers and thunderstorms covered much of the central and northern Plains and eastward to the mid-Atlantic States and New England. Afternoon temperatures rose to 100 degrees or higher in much of central Texas, stressing crops in that already dry area.

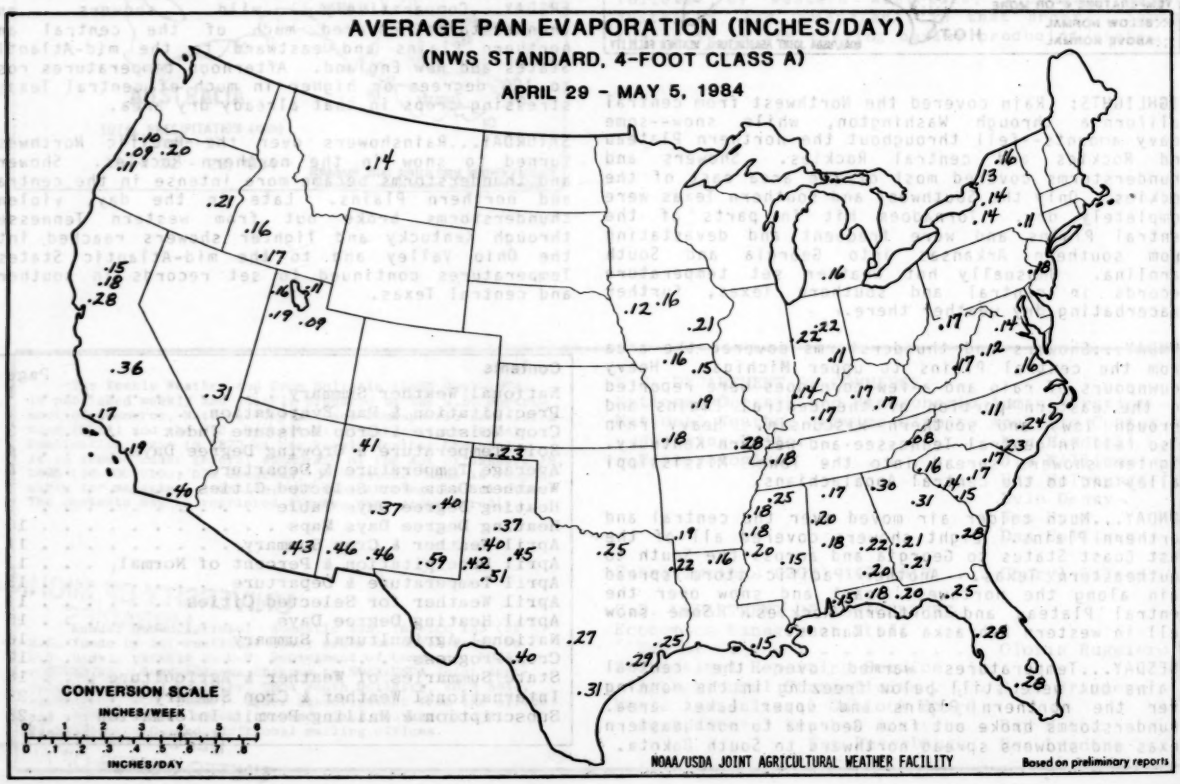
SATURDAY...Rainshowers over the Pacific Northwest turned to snow in the northern Rockies. Showers and thunderstorms became more intense in the central and northern Plains. Late in the day, violent thunderstorms broke out from western Tennessee through Kentucky and lighter showers reached into the Ohio Valley and to the mid-Atlantic States. Temperatures continued to set records in southern and central Texas.

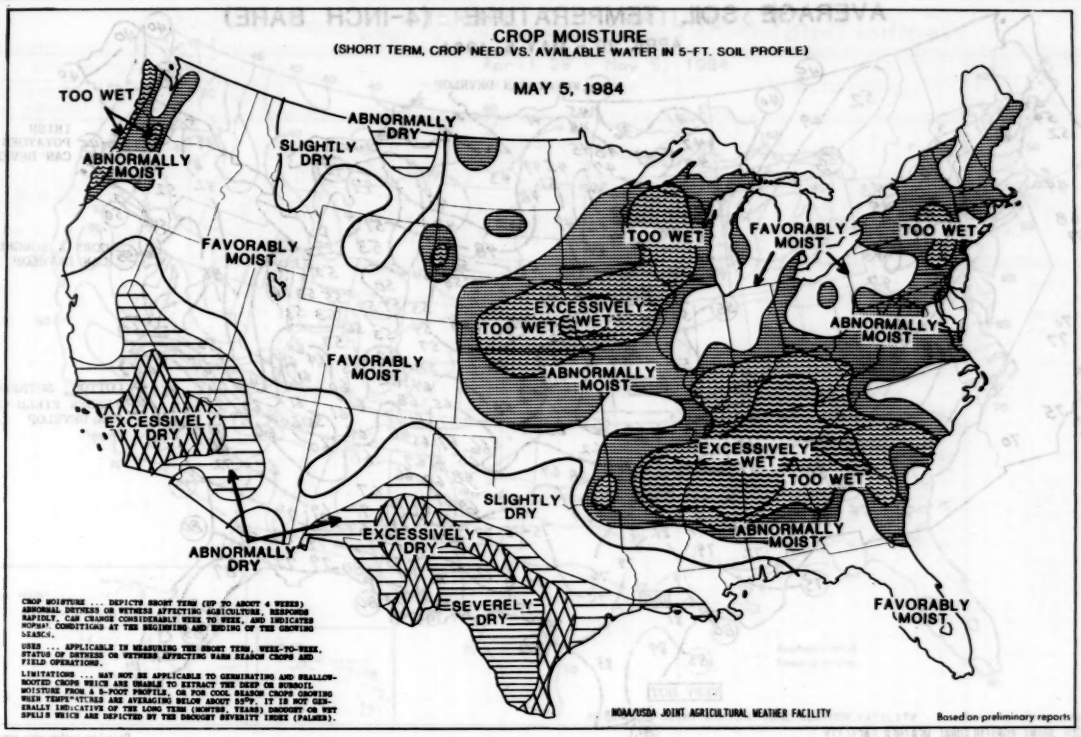
Contents

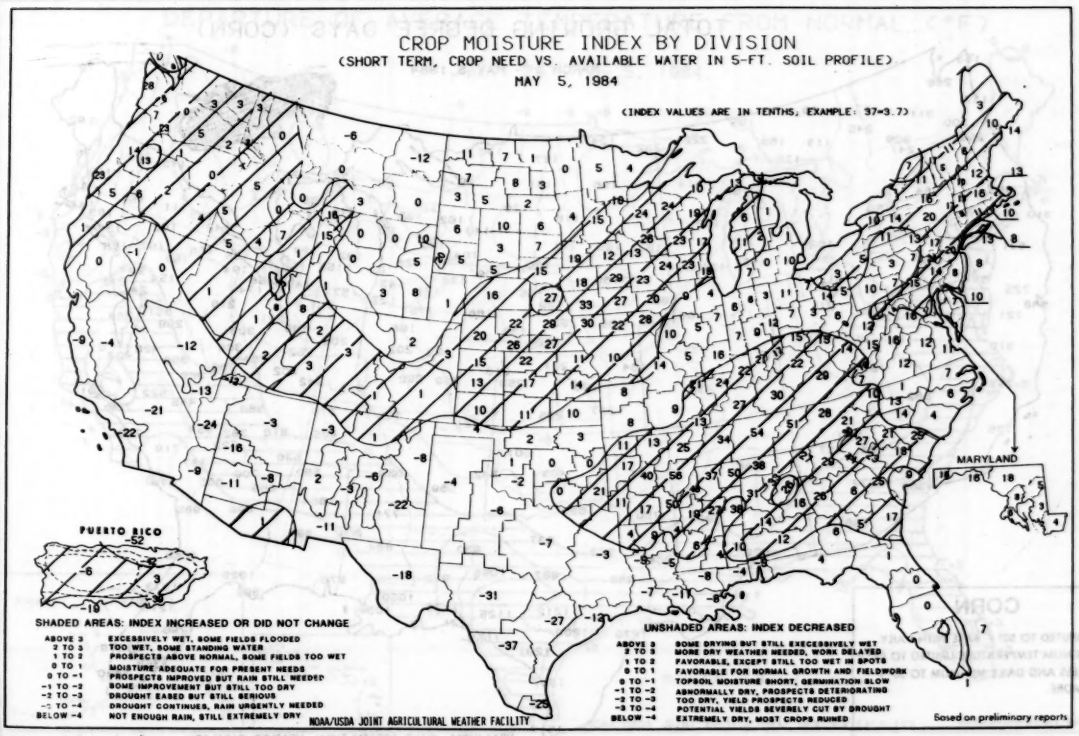
	Page
National Weather Summary	1
Precipitation & Pan Evaporation	2
Crop Moisture & Crop Moisture Index	3
Soil Temperature & Growing Degree Days	4
Average Temperature & Departure	5
Weather Data for Selected Cities	6
Heating Degree Days Table	9
Heating Degree Days Maps	10
April Weather & Crop Summary	11
April Precipitation & Percent of Normal	12
April Temperature & Departure	13
April Weather for Selected Cities	14
April Heating Degree Days	15
National Agricultural Summary	16
Crop Progress	17
State Summaries of Weather & Agriculture	18
International Weather & Crop Summary	25
Subscription & Mailing Permit Information	28

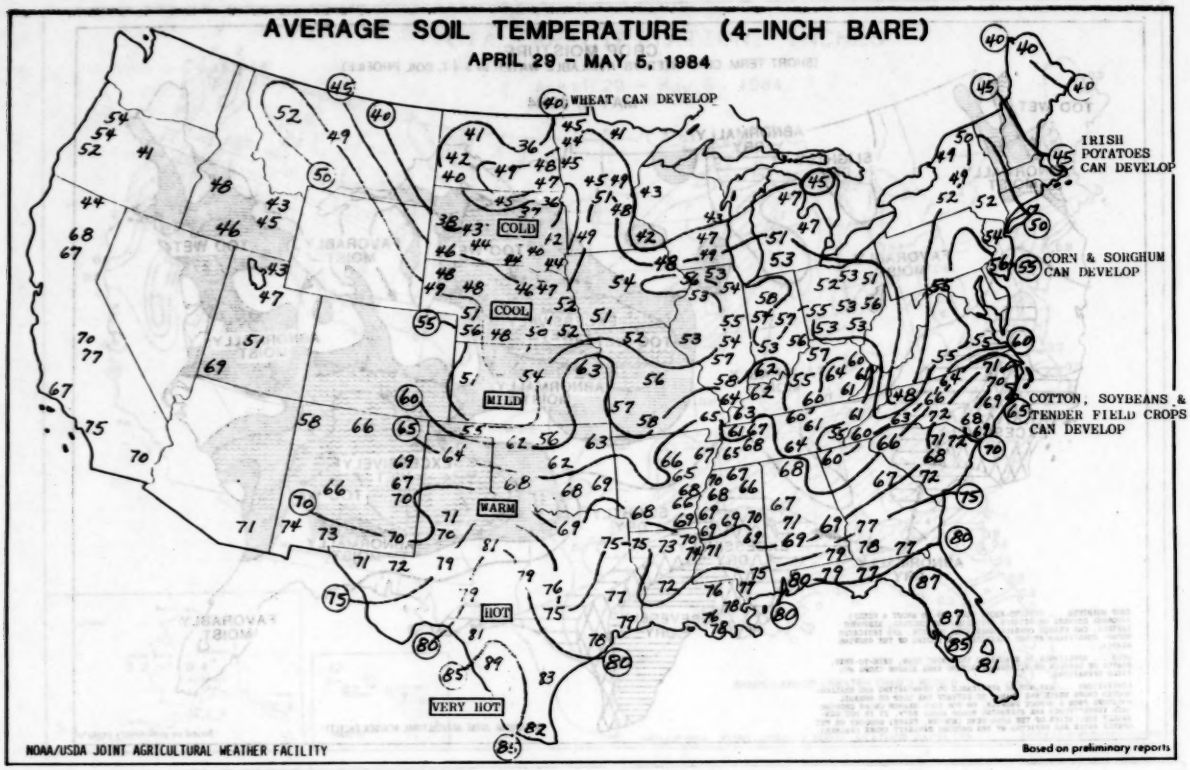
DEPOSITED BY THE UNITED STATES OF AMERICA

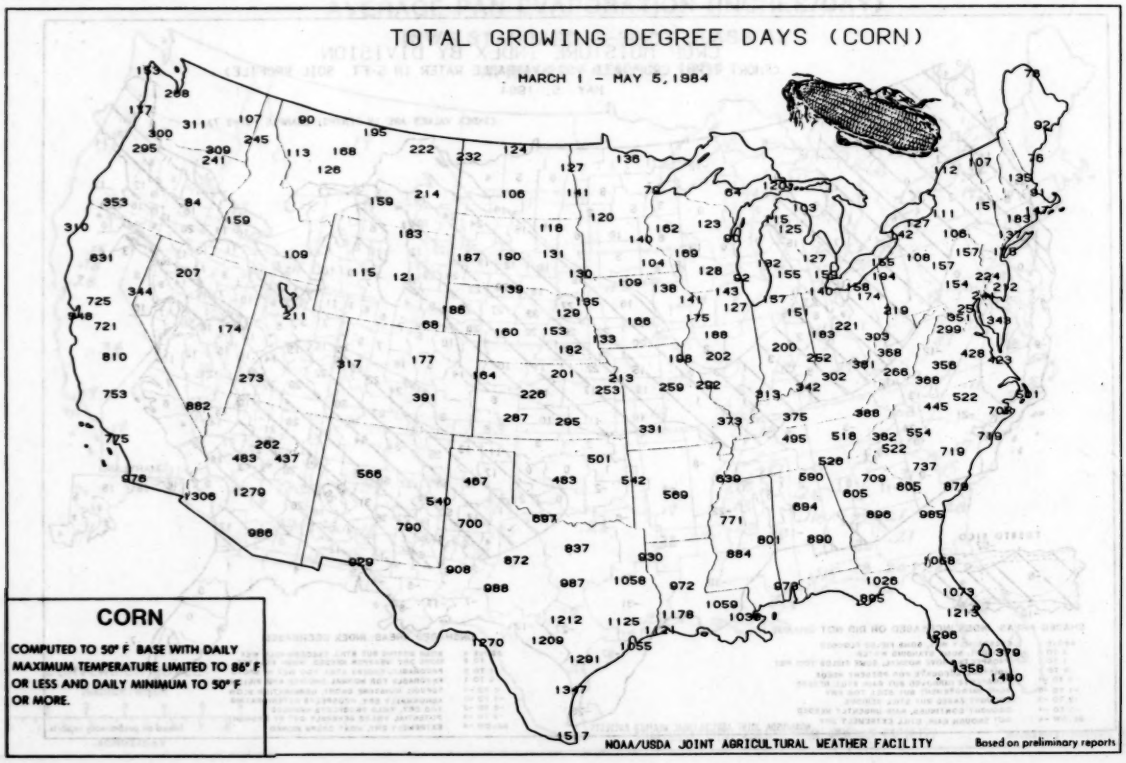

TOTAL PRECIPITATION, INCHES
April 29 - May 5, 1984
ALASKA
HAWAII
SHADED AREAS GREATER THAN 2 INCHES
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

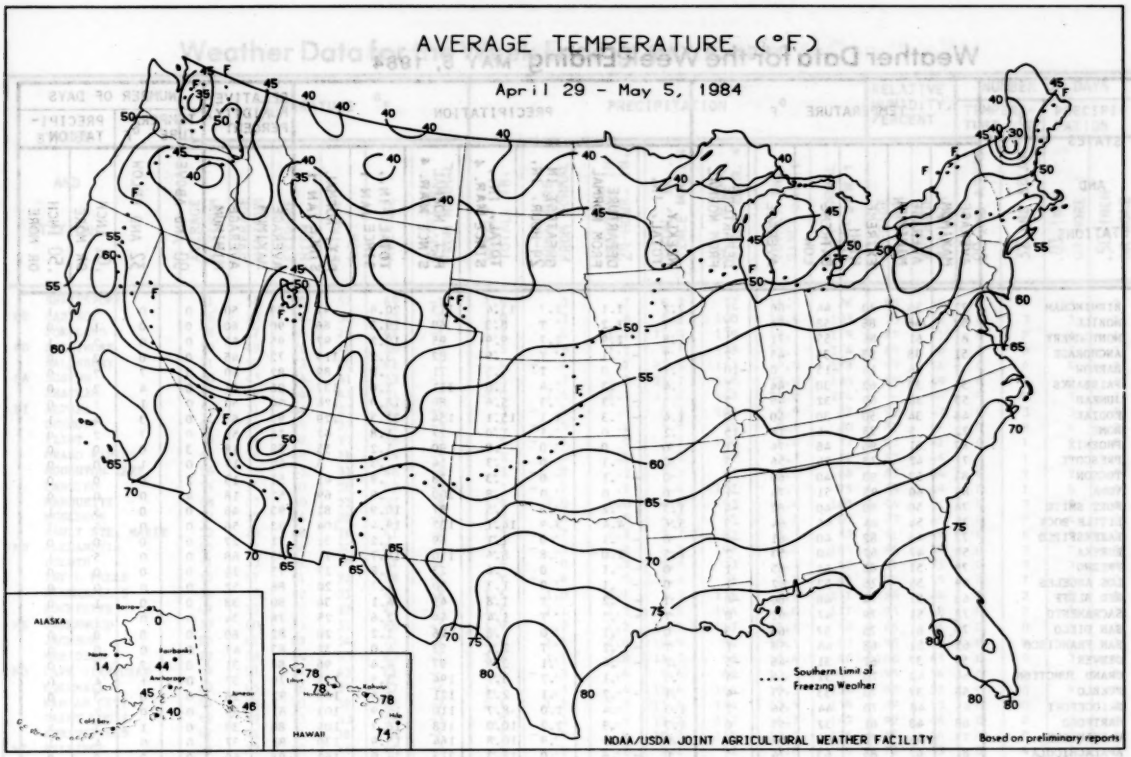

AVERAGE PAN EVAPORATION (INCHES/DAY)
(NWS STANDARD, 4-FOOT CLASS A)
APRIL 29 - MAY 5, 1984
CONVERSION SCALE
INCHES/WEEK
INCHES/DAY
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

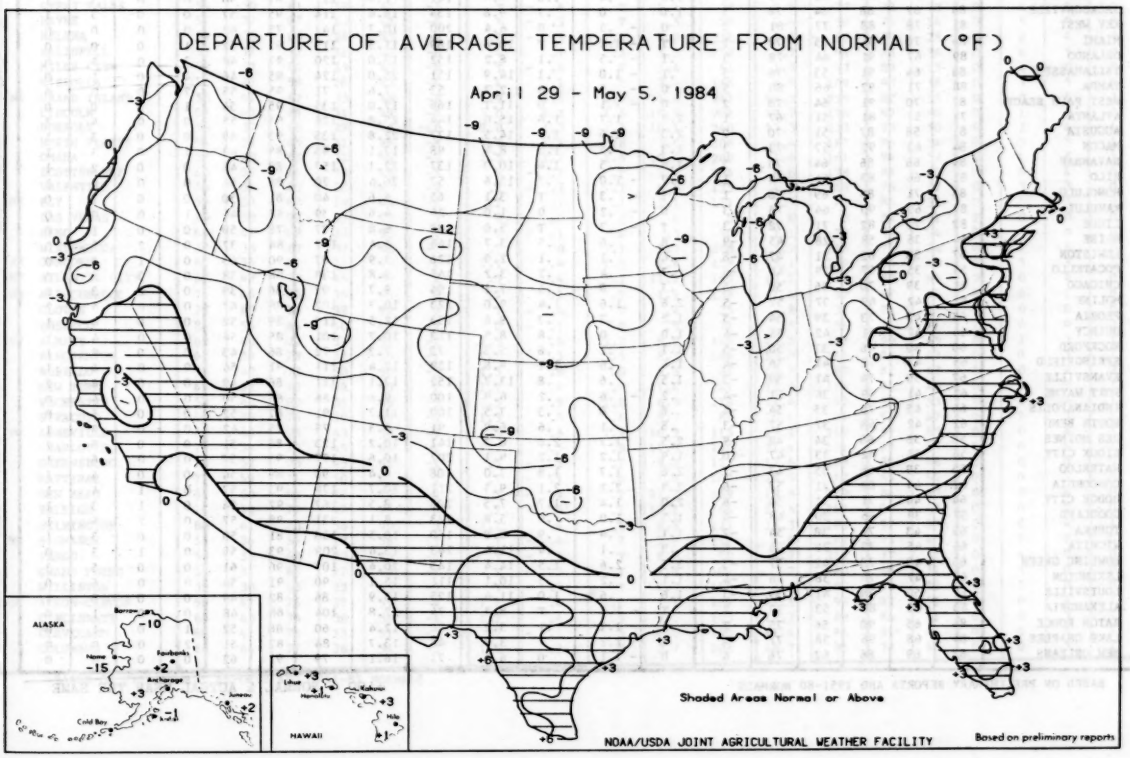

CROP MOISTURE
(SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE)
MAY 5, 1984
TOO WET
ABNORMALLY MOIST
ABNORMALLY DRY
SLIGHTLY DRY
FAVORABLY MOIST
EXCESSIVELY DRY
EXCESSIVELY WET
SEVERELY DRY
CROP MOISTURE ... DEPICTS SHORT TERM (UP TO ABOUT 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE. RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK, AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND ENDING OF THE GROWING SEASON.
USES ... APPLICABLE IN MEASURING THE SHORT TERM, WEEK-TO-WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS.
LIMITATIONS ... MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW-ROOTED CROPS WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A 5-FOOT PROFILE, OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING BELOW ABOUT 50°F. IT IS NOT GENERALLY INDICATIVE OF THE LONG TERM (MONTHS, YEARS) DROUGHT OR WET SPELLS WHICH ARE DEPICTED BY THE DROUGHT SEVERITY INDEX (PALMER).
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


CROP MOISTURE INDEX BY DIVISION
(SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE)
MAY 5, 1984
(INDEX VALUES ARE IN TENTHS, EXAMPLE: 37=3.7)
PUERTO RICO
MARYLAND
SHADED AREAS: INDEX INCREASED OR DID NOT CHANGE
ABOVE 3 EXCESSIVELY WET, SOME FIELDS FLOODED
2 TO 3 TOO WET, SOME STANDING WATER
1 TO 2 PROSPECTS ABOVE NORMAL, SOME FIELDS TOO WET
0 TO 1 MOISTURE ADEQUATE FOR PRESENT NEEDS
0 TO -1 PROSPECTS IMPROVED BUT RAIN STILL NEEDED
-1 TO -2 SOME IMPROVEMENT BUT STILL TOO DRY
-2 TO -3 DROUGHT EASED BUT STILL SERIOUS
-3 TO -4 DROUGHT CONTINUES, RAIN URGENTLY NEEDED
BELOW -4 NOT ENOUGH RAIN, STILL EXTREMELY DRY
UNSHADED AREAS: INDEX DECREASED
ABOVE 3 SOME DRYING BUT STILL EXCESSIVELY WET
2 TO 3 MORE DRY WEATHER NEEDED, WORK DELAYED
1 TO 2 FAVORABLE, EXCEPT STILL TOO WET IN SPOTS
0 TO 1 FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
0 TO -1 TOPSOIL MOISTURE SHORT, GERMINATION SLOW
-1 TO -2 ABNORMALLY DRY, PROSPECTS DETERIORATING
-2 TO -3 TOO DRY, YIELD PROSPECTS REDUCED
-3 TO -4 POTENTIAL YIELDS SEVERELY CUT BY DROUGHT
BELOW -4 EXTREMELY DRY, MOST CROPS RUINED
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


AVERAGE SOIL TEMPERATURE (4-INCH BARE)
APRIL 29 - MAY 5, 1984
WHEAT CAN DEVELOP
IRISH POTATOES CAN DEVELOP
CORN & SORGHUM CAN DEVELOP
COTTON, SOYBEANS & TENDER FIELD CROPS CAN DEVELOP
COLD
COOL
MILD
WARM
HOT
VERY HOT
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


TOTAL GROWING DEGREE DAYS (CORN)
MARCH 1 - MAY 5, 1984
CORN
COMPUTED TO 50° F BASE WITH DAILY MAXIMUM TEMPERATURE LIMITED TO 86° F OR LESS AND DAILY MINIMUM TO 50° F OR MORE.
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


AVERAGE TEMPERATURE (°F)
April 29 - May 5, 1984
ALASKA
HAWAII
Southern Limit of Freezing Weather
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


DEPARTURE OF AVERAGE TEMPERATURE FROM NORMAL (°F)
April 29 - May 5, 1984
ALASKA
HAWAII
Shaded Areas Normal or Above
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

Weather Data for the Week Ending MAY 5, 1984

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																	TEMPERATURE °F		PRECIPITATION	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAR. 4	PCT. NORMAL SINCE MAR. 4	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL	BIRMINGHAM	77	56	80	44	66	-1	2.2	1.1	1.7	13.4	113	20.6	91	89	50	0	0	4	1
	MOBILE	82	66	86	58	74	2	T	-1.2	T	8.3	69	19.3	86	90	60	0	0	1	0
	MONTGOMERY	81	61	86	55	71	1	2.8	1.9	2.7	9.9	95	19.2	97	95	53	0	0	2	1
AK	ANCHORAGE	51	38	53	34	45	2	T	-.1	T	.9	82	3.2	119	72	45	0	0	2	0
	BARROW	7	-6	14	-15	0	-10	.1	0	T	.5	71	.8	89	82	60	0	7	2	0
	FAIRBANKS	54	33	62	30	44	2	.4	.3	.4	1.0	111	2.6	137	96	41	0	4	2	0
	JUNEAU	53	38	60	32	46	2	.5	-.3	.3	5.6	86	18.0	174	94	50	0	1	2	0
	KODIAK	46	34	50	30	40	0	1.4	-.3	1.1	15.1	154	32.3	129	93	63	0	3	4	1
	NOME	22	5	33	-4	14	-15	.2	0	.1	1.0	77	1.8	67	74	55	0	7	2	0
AZ	PHOENIX	87	61	96	46	74	1	0	0	0	.9	90	1.2	55	58	18	3	0	0	0
	PRESCOTT	71	42	78	26	56	3	0	-.1	0	.3	14	.3	5	49	17	0	1	0	0
	TUCSON	84	52	93	40	68	-2	0	-.1	0	.3	38	.9	41	51	13	2	0	0	0
	YUMA	80	60	95	51	74	-1	0	0	0	.8	200	.9	69	52	18	4	0	0	0
AR	FORT SMITH	74	50	80	40	62	-4	1.3	.2	.6	7.5	87	10.9	81	93	46	0	0	5	1
	LITTLE ROCK	75	54	84	46	64	-3	5.6	4.4	3.9	14.1	132	19.4	104	93	56	0	0	5	3
CA	BAKERSFIELD	77	45	82	40	61	-6	0	-.1	0	1.1	69	1.2	31	71	27	0	0	0	0
	EUREKA	59	47	62	40	53	2	1.5	1.0	.8	8.6	110	14.7	71	93	68	0	0	5	1
	FRESNO	79	51	86	44	65	1	0	-.1	0	.6	23	1.8	27	75	24	0	0	0	0
	LOS ANGELES	69	54	76	52	62	1	0	-.1	0	1.3	50	1.7	20	86	52	0	0	0	0
	RED BLUFF	68	51	74	46	60	-4	T	-.2	T	1.8	49	4.1	34	80	38	0	0	1	0
	SACRAMENTO	73	51	79	47	62	0	T	-.2	T	1.4	44	2.6	25	78	34	0	0	1	0
	SAN DIEGO	70	61	75	57	66	3	0	-.1	0	.6	26	1.2	20	82	60	0	0	0	0
	SAN FRANCISCO	65	51	68	48	58	1	T	-.2	T	2.1	53	4.0	32	83	47	0	0	0	0
CO	DENVER	59	37	67	31	48	-5	.2	-.4	.1	3.4	97	4.4	96	84	31	0	2	3	0
	GRAND JUNCTION	64	43	70	31	54	-4	.3	.1	.2	3.1	194	3.5	135	79	32	0	1	4	0
	PUEBLO	68	37	73	33	53	-4	.1	-.2	.1	2.3	121	2.6	100	92	26	0	0	3	0
CT	BRIDGEPORT	65	48	70	44	56	2	1.3	.4	1.0	8.7	110	14.9	103	81	46	0	0	2	1
	HARTFORD	68	43	81	32	55	0	1.7	.9	1.2	10.0	118	16.7	105	86	39	0	1	2	2
DC	WASHINGTON	73	54	77	47	64	1	1.0	.3	.9	10.8	164	15.9	130	81	37	0	0	4	1
FL	APALACHICOLA	81	67	85	63	74	3	0	-.6	0	15.3	213	24.0	162	91	69	0	0	0	0
	DAYTONA BEACH	85	64	89	63	75	2	1.0	.4	1.0	7.6	141	12.6	111	87	50	0	0	3	1
	JACKSONVILLE	86	67	88	64	76	5	1.0	0	.7	9.8	134	16.6	114	95	57	0	0	3	1
	KEY WEST	85	78	88	77	81	2	0	-.5	0	6.4	200	10.7	147	75	67	0	0	0	0
	MIAMI	86	70	91	65	78	1	T	-1.1	T	10.6	189	11.5	115	91	52	1	0	0	0
	ORLANDO	89	67	91	64	78	3	.1	-.5	.1	8.2	152	13.0	120	97	48	3	0	2	0
	TALLAHASSEE	88	64	91	53	76	5	.1	-1.0	.1	14.9	151	25.0	124	95	46	4	0	1	0
	TAMPA	88	71	92	66	80	5	0	-.5	0	2.7	53	7.6	71	95	55	2	0	0	0
	WEST PALM BEACH	87	70	91	64	78	2	0	-1.1	0	11.1	166	17.0	135	95	54	1	0	0	0
GA	ATLANTA	77	57	81	51	67	1	2.7	1.7	1.6	15.0	144	25.8	126	95	55	0	0	4	2
	AUGUSTA	81	58	87	51	70	2	2.3	1.6	1.7	14.5	177	22.8	135	93	49	0	0	3	1
	MACON	84	63	92	57	73	3	1.3	.5	1.0	8.4	98	17.1	93	85	43	1	0	3	1
	SAVANNAH	84	66	86	64	75	5	1.4	.5	1.4	10.0	137	22.1	157	89	46	0	0	2	1
HI	HILO	81	66	83	64	74	1	1.7	-1.0	.7	15.6	57	36.4	70	88	56	0	0	6	1
	HONOLULU	84	71	88	69	78	1	T	-.3	T	3.1	65	4.6	40	81	50	0	0	1	0
	KAHULUI	87	69	90	64	78	3	0	-.2	0	1.0	26	4.6	39	68	46	1	0	0	0
	LIHUE	82	73	82	71	78	3	T	-.7	T	3.0	38	6.8	37	78	58	0	0	1	0
ID	BOISE	54	36	58	28	45	-9	.8	.6	.5	3.7	148	5.4	102	84	37	0	2	3	0
	LEWISTON	57	38	62	31	47	-8	.4	.1	.1	2.9	126	3.9	87	90	43	0	1	5	0
	POCATELLO	54	35	57	29	44	-6	.7	.4	.2	3.2	145	5.8	138	88	38	0	3	6	0
IL	CHICAGO	61	39	70	36	50	-5	.7	0	.5	7.1	104	9.7	97	86	39	0	0	3	0
	MOLINE	62	42	69	37	52	-5	2.6	1.6	1.4	9.0	123	10.7	102	88	47	0	0	5	2
	PEORIA	64	45	73	39	54	-3	1.2	.3	.7	9.6	133	12.5	119	89	52	0	0	4	1
	QUINCY	64	47	71	42	55	-4	1.0	0	.8	8.5	113	10.7	101	85	56	0	0	4	1
	ROCKFORD	60	40	66	37	50	-5	1.1	.2	.8	5.3	73	7.3	72	86	43	0	0	2	1
	SPRINGFIELD	65	47	72	41	56	-4	1.4	.6	1.1	9.8	129	12.4	111	91	54	0	0	4	1
IN	EVANSVILLE	67	50	74	41	59	-3	1.5	.6	.8	13.7	152	17.1	111	86	49	0	0	4	2
	FORT WAYNE	62	41	69	36	51	-4	.2	-.6	.2	6.9	100	9.6	86	86	50	0	0	4	0
	INDIANAPOLIS	64	45	70	35	54	-4	.8	0	.3	7.5	100	11.7	91	87	52	0	0	5	0
	SOUTH BEND	62	42	68	37	52	-3	.8	.1	.6	6.9	91	9.3	75	75	47	0	0	3	1
IA	DES MOINES	58	38	68	34	48	-9	2.5	1.7	2.0	8.3	141	10.2	123	88	51	0	0	5	1
	SIOUX CITY	56	38	62	33	47	-10	1.9	1.2	1.2	9.1	207	10.6	177	93	57	0	0	6	1
	WATERLOO	55	39	66	35	47	-7	2.6	1.7	1.8	7.0	108	8.4	98	89	54	0	0	4	1
KS	CONCORDIA	62	44	68	31	53	-6	2.9	2.2	2.1	9.3	211	10.7	178	93	57	0	1	4	1
	DODGE CITY	64	44	71	31	54	-6	2.0	1.4	1.7	7.5	208	8.5	167	92	54	0	1	3	1
	GOODLAND	57	39	66	30	48	-6	1.5	1.0	.9	5.8	223	8.1	231	98	57	0	2	5	1
	TOPEKA	65	43	71	38	54	-7	1.1	.4	.9	8.8	160	10.5	138	81	50	0	0	3	1
	WICHITA	66	45	73	32	56	-6	.9	.1	.4	11.4	243	13.4	209	93	55	0	1	3	0
KY	BOWLING GREEN	65	49	73	42	57	-5	3.5	2.6	1.5	14.4	145	20.4	107	96	61	0	0	5	3
	LEXINGTON	65	47	70	38	56	-4	1.1	.2	.5	10.1	111	15.1	90	91	54	0	0	6	0
	LOUISVILLE	67	50	74	41	59	-3	1.6	.6	1.0	11.4	125	13.9	86	82	49	0	0	6	1
LA	ALEXANDRIA	83	63	89	53	73	2	T	-1.4	T	8.2	74	22.8	104	86	48	0	0	1	0
	BATON ROUGE	84	65	90	56	75	2	.2	-1.1	.1	3.2	30	12.4	60	88	52	1	0	1	0
	LAKE CHARLES	85	68	96	58	77	4	T	-1.2	T	3.7	48	13.7	84	87	51	2	0	0	0
	NEW ORLEANS	83	69	86	62	76	4	0	-1.1	0	6.7	71	16.1	79	91	62	0	0	0	0

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

+100 = NORMAL & ACTUAL NEAR THE SAME

Weather Data for the Week Ending MAY 5, 1984

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAR. 4	PCT. NORMAL SINCE MAR. 4	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	SHREVEPORT	81	58	90	52	69	-1	1.4	.3	.7	6.9	77	14.6	86	93	50	1	0	3	2
ME	CARIBOU	56	35	76	30	45	0	1.0	.3	.8	5.2	100	10.6	105	75	35	0	3	3	1
	PORTLAND	58	37	66	29	47	-1	1.2	.4	1.1	11.0	139	18.7	119	87	41	0	2	3	1
MD	BALTIMORE	70	49	76	40	60	0	1.5	.8	1.2	9.9	138	15.7	114	85	40	0	0	3	1
	SALISBURY	71	50	73	40	61	1	.4	- .4	.2	12.5	167	19.0	128	97	54	0	0	4	0
MA	BOSTON	60	45	84	41	53	-1	1.5	.7	1.2	11.7	146	22.0	135	89	49	0	0	2	1
	CHATHAM	58	44	64	41	51	2	2.0	1.1	1.7	13.8	168	21.6	124	--	--	0	0	3	1
MI	ALPENA	54	31	64	23	43	-4	.3	- .4	.2	5.2	104	6.9	82	92	47	0	3	3	0
	DETROIT	61	40	69	33	51	-3	.2	- .5	.1	5.9	95	8.1	80	81	40	0	0	4	0
	FLINT	59	36	68	27	48	-5	T	- .6	T	5.7	106	6.8	77	87	41	0	1	2	0
	GRAND RAPIDS	60	36	68	28	48	-5	.8	0	.2	5.3	82	7.3	72	87	46	0	1	4	0
	HOUGHTON LAKE	56	35	65	31	46	-4	.3	- .2	.3	3.3	69	5.3	68	85	44	0	2	2	0
	LANSING	59	36	70	28	47	-5	.3	- .2	.1	5.4	102	6.7	75	85	49	0	1	4	0
	MARQUETTE	48	27	60	22	37	-8	1.9	1.0	1.0	6.4	93	11.4	102	94	51	0	7	3	2
	MUSKEGON	59	35	66	28	47	-5	1.3	.6	.5	4.6	75	7.2	69	83	45	0	2	4	0
	SAULT STE. MARIE	52	29	68	24	41	-4	1.3	.7	1.2	3.7	82	7.3	83	91	49	0	6	3	1
MN	ALEXANDRIA	55	37	64	30	46	-5	.3	- .3	.2	4.2	108	5.8	105	86	38	0	3	2	0
	DULUTH	51	33	61	29	42	-4	.6	0	.3	3.3	73	4.7	69	91	55	0	3	3	0
	INT'L FALLS	50	27	61	22	39	-8	T	- .4	T	1.1	38	2.1	46	82	35	0	7	0	0
	MINNEAPOLIS	54	38	62	31	46	-8	1.6	1.0	1.1	5.3	126	7.7	131	86	44	0	2	3	1
	ROCHESTER	49	35	59	32	42	-10	1.8	1.1	1.3	4.8	104	7.0	111	95	60	0	2	3	1
MS	GREENWOOD	77	60	84	51	68	-1	1.9	.7	1.2	14.2	117	22.1	98	86	56	0	0	3	1
	JACKSON	80	61	89	54	71	1	2.4	1.1	2.0	10.9	90	18.5	83	96	56	0	0	4	1
	MERIDIAN	77	58	84	53	67	-1	2.2	1.1	2.0	11.7	96	19.4	86	100	65	0	0	3	1
MO	CAPE GIRARDEAU	69	53	74	43	61	--	.8	- .3	.4	8.6	89	13.8	86	93	56	0	0	4	0
	COLUMBIA	69	45	76	39	57	-4	1.3	.3	.4	12.6	164	16.3	138	92	52	0	0	4	0
	KANSAS CITY	64	43	70	38	53	-7	2.1	1.2	2.0	11.4	184	13.5	159	89	53	0	0	2	1
	SAINT LOUIS	69	49	75	43	59	-3	.9	.1	.5	12.2	167	16.7	142	92	46	0	0	3	0
	SPRINGFIELD	67	44	74	38	56	-6	.5	- .4	.4	10.3	129	15.2	126	86	46	0	0	3	0
MT	BILLINGS	52	32	60	26	42	-9	.3	- .2	.2	2.1	62	3.8	76	77	33	0	4	2	0
	GLASGOW	58	30	61	21	44	-6	.3	0	.3	1.1	73	1.7	74	65	23	0	5	1	0
	GREAT FALLS	54	30	61	19	42	-7	T	- .4	T	2.1	78	3.6	77	73	28	0	4	1	0
	HAVRE	57	27	67	15	42	-8	T	- .3	T	.5	26	1.4	50	73	24	0	5	0	0
	HELENA	54	35	60	24	45	-4	.2	- .1	.1	2.0	111	2.4	80	72	28	0	2	4	0
	KALISPELL	53	32	57	22	42	-6	.4	.1	.2	3.2	152	4.7	94	82	36	0	4	5	0
	MILES CITY	57	32	61	29	45	-8	T	- .4	T	1.4	61	1.5	47	83	35	0	4	0	0
	MISSOULA	52	33	58	26	43	-6	.4	.1	.2	3.7	168	4.9	109	95	38	0	3	5	0
NE	GRAND ISLAND	56	41	67	33	48	-8	2.9	2.1	1.3	11.8	241	14.2	225	87	55	0	0	4	3
	LINCOLN	59	40	66	31	49	-9	3.0	2.2	1.5	10.9	202	12.7	176	97	60	0	1	6	2
	NORFOLK	56	37	66	29	46	-10	2.0	1.3	1.5	10.1	240	13.3	233	93	50	0	2	4	1
	NORTH PLATTE	54	38	65	31	46	-8	1.7	1.1	.8	7.0	206	8.4	187	86	54	0	3	5	1
	OMAHA	57	40	65	32	49	-9	2.5	1.7	1.6	10.4	200	11.6	161	94	57	0	1	6	1
	SCOTTSBLUFF	60	36	64	33	48	-5	.4	- .1	.2	5.7	204	6.6	178	88	33	0	0	4	0
	VALENTINE	56	31	63	22	43	-9	.3	- .3	.2	4.0	125	4.5	113	76	37	0	3	3	0
NV	ELY	59	30	67	19	44	-2	.2	- .1	.1	2.1	111	2.9	83	85	37	0	5	3	0
	LAS VEGAS	85	58	92	47	72	2	0	- .1	0	0	0	0	0	34	11	2	0	0	0
	RENO	64	41	68	33	53	1	0	- .1	0	.5	50	1.1	32	58	24	0	0	0	0
	WINNEMUCCA	57	39	67	32	48	-3	.1	0	.1	2.7	208	3.7	116	70	34	0	1	4	0
NH	CONCORD	62	35	81	25	49	-2	1.1	.4	1.0	7.8	128	15.1	129	88	40	0	3	3	1
NJ	ATLANTIC CITY	68	49	73	46	59	2	.3	- .4	.1	11.2	149	17.2	116	86	44	0	0	4	0
NM	ALBUQUERQUE	76	45	83	35	61	0	.2	.1	.2	1.1	138	1.4	82	57	15	0	0	1	0
	CLOVIS	77	47	86	38	62	0	T	- .4	T	.4	25	.8	31	74	17	0	0	0	0
	ROSWELL	84	53	94	40	69	2	0	- .1	0	.5	71	.5	36	35	11	2	0	0	0
NY	ALBANY	62	40	77	31	51	-2	1.5	.8	1.2	8.9	144	13.2	117	90	45	0	2	3	1
	BINGHAMTON	61	39	73	33	50	-1	1.0	.3	.5	8.3	126	13.3	111	89	43	0	0	3	1
	BUFFALO	59	42	78	38	50	-2	1.5	.8	.8	5.5	87	10.7	89	82	47	0	0	4	2
	NEW YORK	67	52	73	48	60	2	1.2	.4	.7	11.4	141	17.2	116	81	48	0	0	2	1
	ROCHESTER	58	40	80	35	49	-3	1.5	.9	1.0	6.3	119	11.4	112	85	53	0	0	4	1
	SYRACUSE	60	38	75	30	49	-4	1.3	.5	.6	5.7	84	10.4	84	91	47	0	2	3	1
NC	ASHEVILLE	68	48	75	43	58	-3	1.5	.6	1.2	10.3	113	19.1	113	97	63	0	0	4	1
	CHARLOTTE	75	54	79	45	64	-1	1.2	.5	.8	11.5	140	21.4	131	89	45	0	0	4	1
	GREENSBORO	73	52	78	45	62	-1	.5	- .2	.2	8.8	121	17.6	119	89	48	0	0	4	0
	HATTERAS	73	59	76	50	66	2	.7	- .1	.4	7.8	107	14.5	87	85	54	0	0	3	0
	NEW BERN	81	60	85	56	70	4	.5	- .4	.2	11.3	169	19.8	129	84	43	0	0	4	0
	RALEIGH	76	53	79	47	65	0	.2	- .6	.1	10.1	144	20.6	142	91	47	0	0	2	0
	WILMINGTON	80	61	83	56	70	3	1.2	.4	.6	8.8	121	16.3	109	92	49	0	0	4	1
ND	BISMARCK	51	24	59	19	38	-13	T	- .4	T	5.3	212	6.0	182	93	42	0	7	2	0
	FARGO	56	33	63	27	44	-6	T	- .5	T	2.8	90	4.7	112	77	31	0	4	0	0
	GRAND FORKS	54	31	63	27	43	-7	T	- .3	T	2.6	104	3.7	100	80	31	0	5	0	0
	WILLISTON	59	30	66	22	45	-5	T	- .3	T	2.3	110	3.2	100	72	22	0	5	0	0
OH	AKRON-CANTON	60	42	76	39	51	-4	1.2	.4	1.0	7.1	104	11.1	93	83	51	0	0	4	1
	CINCINNATI	66	45	76	36	56	-4	1.2	.4	.9	9.5	123	12.7	89	84	51	0	0	3	1
	CLEVELAND	60	41	73	33	51	-3	.7	- .1	.5	6.6	100	11.4	96	81	46	0	0	2	1
	COLUMBUS	64	44	77	38	54	-3	1.0	.2	.9	7.7	108	10.7	86	78	43	0	0	5	1

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

Weather Data for the Week Ending MAY 5, 1984

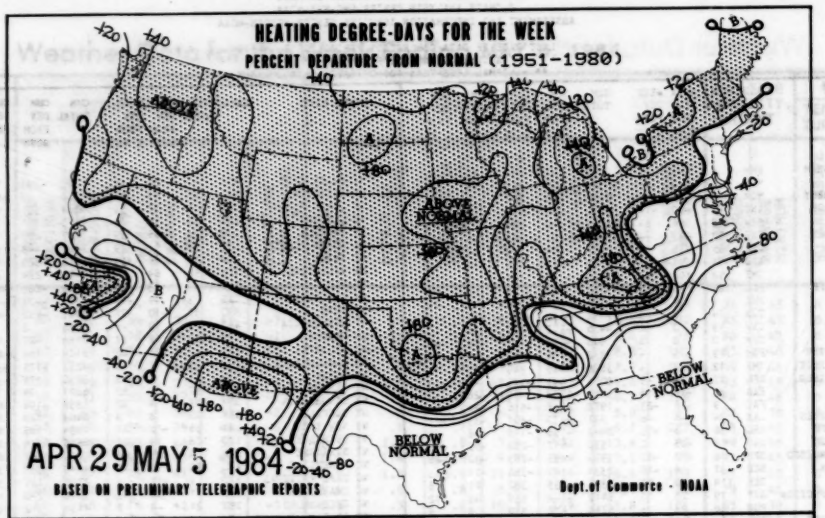
STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAR. 4	PCT. NORMAL SINCE MAR. 4	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	62	44	74	35	53	-5	1.1	.3	.7	8.1	116	12.0	99	79	45	0	0	5	1
TOLEDO	60	41	69	32	51	-3	.1	- .6	.1	8.2	137	10.4	102	85	47	0	1	3	0
YOUNGSTOWN	63	42	78	34	53	-1	.7	- .1	.6	5.8	82	9.4	75	80	42	0	0	4	1
OK OKLAHOMA CITY	72	49	78	38	61	-4	.4	- .7	.2	6.7	122	8.3	102	85	43	0	0	3	0
TULSA	72	50	79	40	61	-5	.7	- .5	.4	9.4	118	12.7	112	90	46	0	0	5	0
OR ASTORIA	53	42	55	37	48	-3	2.3	1.6	.8	12.1	107	27.4	86	93	68	0	0	7	2
BURNS	50	33	55	27	42	-7	.7	.6	.2	3.1	310	4.1	228	84	46	0	3	5	0
MEDFORD	62	43	67	36	53	-2	.4	.2	.4	3.1	107	5.8	67	88	38	0	0	3	0
PENDLETON	57	40	59	36	49	-6	.4	.2	.2	3.8	190	6.2	122	85	44	0	0	5	0
PORTLAND	58	46	62	44	52	-2	1.7	1.2	.8	7.6	131	13.6	82	89	55	0	0	7	1
SALEM	57	42	60	33	49	-3	1.8	1.4	1.0	9.5	148	17.2	92	97	65	0	0	7	1
PA ALLENTOWN	66	47	76	41	57	1	2.7	1.8	1.9	11.4	137	16.6	109	81	40	0	0	4	2
ERIE	61	41	80	35	51	0	1.4	.6	.8	5.9	83	9.9	81	79	41	0	0	4	2
HARRISBURG	64	46	74	42	55	-3	1.1	.3	.8	10.3	149	15.8	121	85	39	0	0	3	1
PHILADELPHIA	68	49	72	44	58	0	.8	.1	.3	11.0	145	15.9	113	83	41	0	0	4	0
PITTSBURGH	64	43	78	37	53	-3	.7	- .1	.7	6.8	94	10.3	80	72	40	0	0	2	1
SCRANTON	64	47	76	40	56	1	1.2	.5	.9	7.8	130	12.0	111	79	41	0	0	4	1
RI PROVIDENCE	66	44	78	40	55	1	.9	.1	.6	11.1	131	20.4	120	86	39	0	0	3	1
SC CHARLESTON	80	64	84	60	72	3	1.5	.7	1.0	13.0	178	21.6	149	95	53	0	0	3	1
COLUMBIA	80	58	86	47	69	0	1.3	.5	.7	10.5	121	19.5	109	97	48	0	0	4	2
FLORENCE	79	58	84	51	69	0	1.2	.6	.6	11.3	159	18.6	128	95	47	0	0	4	1
GREENVILLE	72	54	79	44	63	-3	2.3	1.4	1.1	12.5	119	22.7	114	96	58	0	0	4	2
SD ABERDEEN	54	37	63	30	46	-7	.5	0	.2	4.8	145	6.2	138	84	48	0	1	4	0
HURON	56	37	65	27	46	-6	.4	- .2	.2	4.1	117	5.7	119	96	54	0	2	5	0
RAPID CITY	50	30	59	25	40	-11	.4	- .1	.2	4.1	124	4.5	102	85	47	0	4	4	0
SIOUX FALLS	56	36	66	28	46	-8	1.0	.4	.7	7.3	174	9.1	163	99	56	0	2	6	1
TN CHATTANOOGA	71	51	76	43	61	-4	3.9	3.0	1.8	12.9	118	20.6	95	94	52	0	0	4	2
KNOXVILLE	70	47	80	38	58	-6	3.3	2.5	1.6	10.1	109	16.9	89	98	62	0	0	5	2
MEMPHIS	75	56	81	49	66	-2	4.7	3.4	3.0	15.1	129	21.5	100	87	53	0	0	5	2
NASHVILLE	69	51	75	41	60	-4	4.6	3.6	2.1	15.4	151	19.6	100	96	55	0	0	5	3
TX ABILENE	85	58	96	44	72	2	0	- .7	0	.7	18	2.2	37	73	17	3	0	0	0
AMARILLO	73	43	80	32	58	-4	.7	.2	.7	2.1	91	3.1	94	86	31	0	1	1	1
AUSTIN	91	66	100	59	79	6	T	- .9	T	2.5	48	5.2	54	75	27	4	0	2	0
BEAUMONT	82	69	93	62	75	3	T	- 1.0	T	2.9	40	13.6	88	99	61	1	0	1	0
BROWNSVILLE	92	75	98	71	83	6	0	- .4	0	.1	4	5.4	102	92	50	5	0	0	0
CORPUS CHRISTI	89	70	103	62	80	4	T	- .6	T	.2	6	6.6	97	95	48	3	0	0	0
DEL RIO	92	66	99	56	79	4	T	- .5	T	0	0	1.6	39	59	17	4	0	0	0
EL PASO	83	52	90	33	68	-1	0	0	0	.4	80	.7	54	33	10	2	0	0	0
FORT WORTH	81	56	95	45	69	-2	1.8	.8	1.5	7.9	122	12.0	118	89	38	1	0	2	1
GALVESTON	79	70	94	65	75	2	T	- .7	T	1.4	27	5.6	52	100	66	1	0	1	0
HOUSTON	85	66	92	60	75	3	T	- 1.1	T	2.9	39	11.1	77	82	39	2	0	1	0
LUBBOCK	82	46	91	35	64	-1	0	- .5	0	.5	21	.7	21	89	20	1	0	0	0
MIDLAND	89	56	99	47	73	4	0	- .4	0	0	0	.6	23	43	8	4	0	0	0
SAN ANGELO	90	60	103	52	75	4	T	- .6	T	.7	23	3.7	82	59	14	4	0	0	0
SAN ANTONIO	92	64	99	55	78	5	T	- .8	T	2.0	43	4.3	52	74	24	5	0	2	0
VICTORIA	87	69	99	62	78	4	T	- .8	T	1.9	41	6.4	70	89	48	2	0	1	0
WACO	88	58	100	48	73	2	T	- 1.1	T	4.0	62	5.8	55	88	34	4	0	1	0
WICHITA FALLS	79	51	85	37	65	-3	1.0	.1	1.0	3.0	54	4.0	51	85	33	0	0	2	1
UT BLANDING	65	37	70	27	51	-2	0	- .1	0	1.4	100	2.1	53	69	25	0	2	0	0
CEDAR CITY	67	39	76	27	53	1	T	- .2	T	2.8	133	4.3	110	59	20	0	1	0	0
SALT LAKE CITY	58	44	62	39	51	-4	.9	.4	.5	6.7	163	8.1	117	84	45	0	0	5	0
VT BURLINGTON	58	39	77	28	49	-2	1.4	.8	.9	6.5	170	10.3	111	77	39	0	2	3	2
VA NORFOLK	75	56	81	49	66	3	.1	- .7	.1	12.5	181	20.1	139	76	37	0	0	2	0
RICHMOND	75	53	78	44	64	2	.2	- .6	.2	14.9	219	23.0	168	86	44	0	0	1	0
ROANOKE	71	53	81	46	62	0	1.1	.3	.9	9.3	129	15.6	113	86	47	0	0	4	1
WA COLVILLE	56	37	58	30	46	-5	.7	.4	.4	5.2	226	8.2	134	89	63	0	2	4	0
QUILLAYUTE	52	40	54	34	46	-3	3.4	2.1	1.4	19.0	106	52.0	111	99	69	0	0	7	2
SEATTLE-TACOMA	56	43	58	40	49	-3	1.3	.9	.7	7.6	131	15.1	92	91	57	0	0	6	1
SPOKANE	52	34	55	29	43	-8	.6	.4	.3	3.6	164	6.1	95	90	49	0	3	7	0
YAKIMA	59	36	65	29	47	-6	.5	.4	.2	2.4	218	3.4	100	79	41	0	3	4	0
WV BECKLEY	65	46	73	41	55	-1	1.1	.3	.7	6.0	76	11.6	76	90	51	0	0	5	1
CHARLESTON	71	50	84	43	60	0	1.3	.5	.8	8.1	104	12.3	82	77	42	0	0	5	1
HUNTINGTON	70	51	82	44	60	0	1.4	.5	.7	8.3	104	12.1	84	76	46	0	0	5	1
PARKERSBURG	68	49	83	42	59	0	.6	- .3	.5	7.8	103	10.5	69	88	48	0	0	3	0
WI GREEN BAY	54	34	61	28	44	-7	1.6	.9	1.5	5.2	102	7.3	99	87	43	0	1	2	1
LA CROSSE	54	38	63	33	46	-9	1.1	.3	.8	6.1	111	7.1	95	91	44	0	0	4	1
MADISON	56	36	67	32	46	-7	2.8	2.0	1.7	6.0	103	7.6	94	81	43	0	2	4	2
MILWAUKEE	56	40	67	33	48	-3	1.8	1.2	1.2	7.2	116	9.3	98	79	42	0	0	5	1
WAUSAU	53	34	62	30	43	-8	2.4	1.6	1.9	5.1	96	7.0	97	94	44	0	1	2	1
WY CASPER	54	28	60	19	41	-7	.5	0	.2	4.1	141	5.9	144	92	35	0	5	7	0
CHEYENNE	52	29	58	21	41	-7	.5	0	.2	5.6	207	7.0	179	91	40	0	5	6	0
LANDER	52	30	60	19	41	-7	.1	- .6	.1	4.2	111	6.5	133	78	35	0	4	1	0
SHERIDAN	48	27	54	18	38	-11	.2	- .3	.2	3.8	115	4.9	100	82	45	0	5	1	0
PR SAN JUAN	88	73	90	70	81	1	T	- 1.2	T	1.1	16	6.3	52	78	49	2	0	1	0

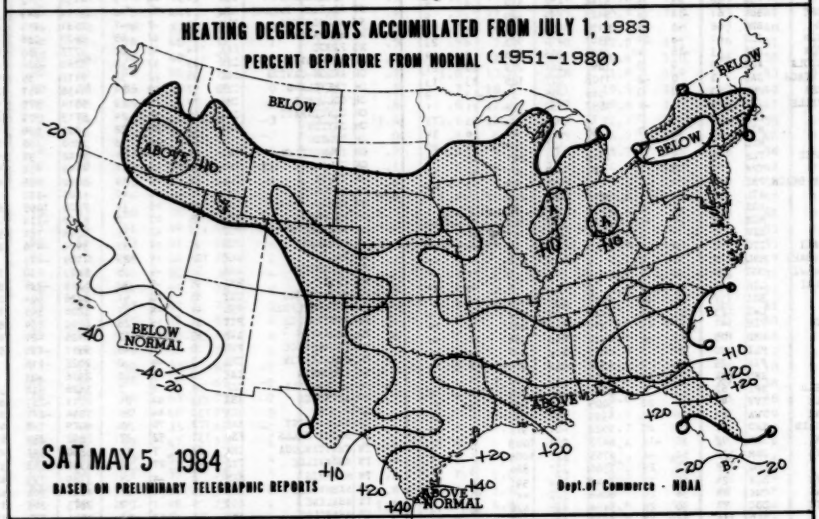
BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

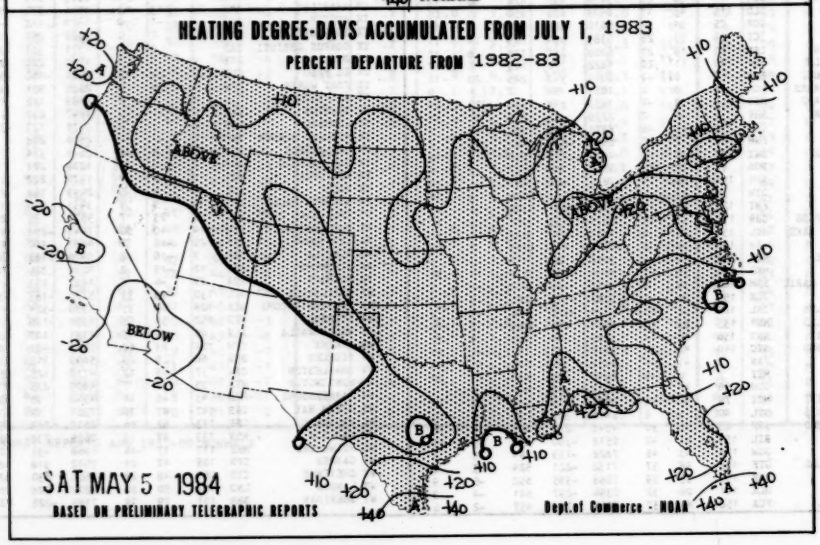
HEATING DEGREE DAY DATA WEEKLY SUMMARY
CLIMATE ANALYSIS CENTER-NMC-W/S-NOAA
ASSESSMENT AND INFORMATION SERVICES CENTER-NESDIS-NOAA

LAST DATE OF DATA COLLECTION PERIOD 18 5- 5-1984
ACCUMULATIONS ARE FROM JULY 1
** = NORMAL LESS THAN 100 OR RATIO INCALCULABLE

STATE CITY	CALL	WEEK TOTAL	WEEK DEV FROM NORM	WEEK DEV FROM L YR	CUM TOTAL	CUM DEV FROM NORM	CUM DEV FROM L YR	CUM DEV FROM NORM PRCT	CUM DEV FROM L YR PRCT
AL BIRMINGHAM	BHM	6	-5	-7	3179	-141	291	12	10
AL MOBILE	MOB	0	-3	-4	2071	-176	167	22	9
AL MONTGOMERY	MGM	0	-7	-6	2393	-320	252	5	12
AK ANCHORAGE	ANC	141	-20	-19	9110	-2435	-535	-9	-6
AK BARROW	BRW	449	66	64	18953	340	596	3	3
AK FAIRBANKS	FAI	150	-13	-1	12986	-727	492	-5	4
AK JUNEAU	JNU	135	-15	2	7516	-774	119	-9	2
AK KODIAK	ADQ	171	1	33	7036	-811	158	-10	2
AK NOME	OME	358	104	152	12762	-329	1184	-3	10
AZ FLAGSTAFF	FLG	127	-5	-16	5181	-323	-710	-8	-10
AZ PHOENIX	PHX	4	-4	-4	791	-651	-265	-45	-25
AZ TUCSON	TUS	14	-6	-5	1532	-496	-257	-11	-14
AZ WINSLOW	INW	49	0	-16	4635	-512	402	-6	10
AZ YUMA	YUM	0	0	0	506	-771	-182	-49	-26
AR FORT SMITH	FSM	19	5	-4	3932	-476	440	14	13
AR LITTLE ROCK	LRT	12	-4	-4	3626	-485	345	15	11
CA BAKERSFIELD	BFL	27	-12	-5	2056	-443	-345	-2	-14
CA EUREKA	EKA	62	-16	6	3051	-1262	-959	-26	-2
CA FRESNO	FAT	9	-16	-23	1972	-838	-516	-24	-21
CA LOS ANGELES	LAX	24	-6	-6	991	-773	-201	-33	-17
CA RED BLUFF	RBL	36	8	-15	2440	-198	-145	-8	-6
CA SAN DIEGO	SAN	6	-15	0	530	-657	-202	-55	-28
CA SAN FRANCISCO	SFO	48	-12	-20	1994	-853	-703	-30	-26
CA STOCKTON	SCK	31	6	-15	2334	-301	-356	-11	-13
CO DENVER	DEN	114	30	13	6393	635	382	11	6
CO GRAND JUNCTION	GJT	79	26	10	5417	-144	559	-3	12
CO PUEBLO	PUB	86	26	16	5740	412	410	8	8
CT BRIDGEPORT	BDL	61	-14	16	5423	99	429	2	9
CT HARTFORD	BDL	68	-1	45	6153	136	634	2	11
DE WILMINGTON	ILG	41	-6	24	5301	-110	983	8	23
DC WASHINGTON	DCA	13	-16	4	4187	-108	528	3	14
FL APALACHICOLA	AQQ	0	0	0	1691	221	289	20	21
FL DAYTONA BEACH	DAB	0	0	-2	1108	207	125	23	13
FL FORT MEYER	FMY	0	0	0	385	-55	31	-13	9
FL JACKSONVILLE	JAX	0	0	-1	1557	150	18	11	1
FL KEY WEST	EYW	0	0	0	78	-38	33	-33	73
FL MIAMI	MIA	0	0	0	186	-12	47	-6	34
FL ORLANDO	MCO	0	0	0	759	101	124	15	20
FL TALLAHASSEE	TLH	0	0	-1	1816	163	261	10	17
FL TAMPA	TPA	0	0	0	727	-12	101	-2	16
FL WEST PALM BEACH	PBI	0	0	0	297	34	59	13	25
GA ATLANTA	ATL	1	-13	-12	3254	252	239	9	8
GA AUGUSTA	AGS	0	-7	-6	2618	61	77	2	3
GA MACON	MCN	0	-4	-1	2330	57	205	3	10
GA SAVANNAH	SAV	0	0	0	1901	-20	87	-1	5
HI HILO-HAWAII	ITO	0	0	0	0	0	0	**	**
HI HONOLULU-OAHU	HNL	0	0	0	0	0	0	**	**
HI KAHULUI-MAUI	OGG	0	0	0	0	0	0	**	**
HI LIHUE-KAUAI	LIH	0	0	0	0	0	0	**	**
ID BOISE	BOI	137	58	45	6178	642	900	12	17
ID LEWISTON	LWS	123	53	52	5122	-67	437	-1	9
ID POCATELLO	PIH	141	36	25	7356	622	882	9	14
IL CHICAGO	ORD	105	33	-6	6920	566	966	11	16
IL MOLINE	MLI	90	30	15	6579	228	907	4	16
IL PEORIA	PIA	75	15	7	6312	232	979	4	18
IL ROCKFORD	RFD	104	30	10	7152	360	1022	6	17
IL SPRINGFIELD	SPI	62	13	0	6094	560	956	10	19
IN EVANSVILLE	EVV	45	11	20	5005	154	985	3	25
IN FORT WAYNE	FWA	98	21	24	6399	252	1183	4	23
IN INDIANAPOLIS	IND	72	19	20	5928	-37	977	-1	20
IN SOUTH BEND	SBN	92	17	16	6472	291	1063	5	20
IA DES MOINES	DSM	114	59	46	6765	337	1008	5	18
IA DUBUQUE	DBQ	124	49	29	7366	201	866	3	13
IA SIOUX CITY	SUX	124	66	37	7148	334	591	5	9
KS CONCORDIA	CNK	85	36	24	6068	565	447	10	8
KS DODGE CITY	DDC	74	30	28	5454	496	626	10	13
KS GOODLAND	GLD	115	43	17	6508	606	850	10	15
KS TOPEKA	TOP	75	34	44	5610	378	722	7	15
KS WICHITA	ICT	64	33	25	5383	654	525	14	11
KY LEXINGTON	LEX	60	18	27	5005	287	724	6	17
KY LOUISVILLE	SDF	45	11	20	4822	370	689	8	17
LA BATON ROUGE	BTR	0	0	-1	2014	140	245	20	14
LA LAKE CHARLES	LCH	0	0	0	1635	56	2	4	0
LA NEW ORLEANS	MSY	0	0	-1	1833	344	360	23	24
LA SHREVEPORT	SHV	6	-1	2	2739	-473	279	21	11
ME CARIBOU	CAR	138	-3	46	8874	-253	580	-3	7
ME PORTLAND	PWM	121	7	57	6889	-224	467	-3	7
MD BALTIMORE	BWI	37	-8	18	4919	290	556	6	13
MA BOSTON	BOS	85	10	73	5600	186	677	3	14
MI ALPENA	APN	155	29	17	7893	-68	687	-1	10
MI DETROIT	DTW	99	20	-4	6702	343	1016	5	18
MI FLINT	FNT	121	32	11	7068	291	1302	4	23
MI GRAND RAPIDS	GRR	116	32	-3	6871	193	982	3	17
MI HOUGHTON LAKE	HTL	134	23	6	7801	-98	803	-1	11
MI LANSING	LAN	122	36	2	7208	473	1053	7	17
MI MARQUETTE	MQT	193	55	5	9010	21	457	0	5
MI MUSKEGON	MKG	127	34	-1	6896	252	819	4	13
MI SAULT ST MARIE	SSM	168	30	0	8612	-120	273	-1	3
MN DULUTH	DLH	159	25	-1	9067	-313	245	-3	3
MN INT'L FALLS	INL	182	52	25	9778	-342	796	-3	9
MN MINNEAPOLIS	MSP	133	53	40	8049	255	1069	3	15
MN ROCHESTER	RST	156	66	44	8365	346	1063	4	15
MN SAINT CLOUD	STC	140	42	26	8610	-53	761	-1	10
MS JACKSON	JAN	5	-1	-1	2752	367	240	15	10
MS MERIDIAN	MEI	7	0	-5	2896	-28	663	17	30
MO COLUMBIA	COU	56	14	7	5558	449	804	9	17
MO KANSAS CITY	MCI	79	42	34	5904	715	766	14	15
MO SAINT LOUIS	STL	40	3	6	5176	328	729	7	16
MO SPRINGFIELD	SGF	65	30	30	4948	279	622	6	15
MT BILLINGS	BIL	159	61	47	6516	-350	631	-5	11
MT GLASGOW	GGW	146	43	45	7328	-759	244	-9	3
MT GREAT FALLS	GTF	158	48	37	7132	-221	524	-3	8
MT HAVRE	HVR	157	53	39	7388	-395	652	-5	9
MT HELENA	HLN	141	26	32	7396	-297	601	-4	9
MT KALISPELL	FCA	158	41	37	7664	-159	457	-2	6
MT MILES CITY	MLS	141	52	46	7220	-393	477	-5	7
MT MISSOULA	MSO	155	43	44	7346	30	665	0	10
NE GRAND ISLAND	GRI	115	57	33	5664	331	450	5	7
NE LINCOLN	LNK	109	58	45	6615	351	731	6	12
NE NORFOLK	OFK	128	65	39	7157	289	780	4	12
NE NORTH PLATTE	LBF	134	57	29	7129	448	814	7	13
NE OMAHA	OMA	114	65	39	5916	329	628	14	14
NE VALENTINE	VTN	150	64	24	7403	264	838	4	13
NV ELY	ELY	144	13	-15	6866	-285	-219	-4	-3
NV LAS VEGAS	LAS	3	-9	-19	2097	-423	-427	-17	-17
NV RENO	RNO	87	-10	-67	5007	-652	-821	-12	-14
NV WINNEMUCCA	WMC	119	19	-6	6056	2	58	0	1
NH CONCORD	CON	112	12	77	7158	-27	747	0	12
NJ ATLANTIC CITY	ACY	41	-18	26	5129	184	643	4	14
NM ALBUQUERQUE	ABQ	33	-1	-9	4250	-111	-328	-3	-7
NM ROSWELL	ROW	11	1	-5	3296	174	-102	6	-8
NY ALBANY	ALB	97	13	57	6601	94	722	1	12
NY BINGHAMTON	BGM	103	4	52	6837	-198	640	-3	10
NY BUFFALO	BUF	102	8	9	6666	126	807	2	14
NY NEW YORK	LGA	66	-16	21	4994	165	616	4	14
NY ROCHESTER	ROC	108	19	28	6595	116	813	2	14
NY SYRACUSE	SYR	109	23	49	7030	487	820	7	13
NC ASHEVILLE	AVL	50	10	18	4449	259	339	6	8
NC CAPE HATTERAS	HAT	9	-11	4	2790	128	191	5	16
NC CHARLOTTE	CLT	11	-6	-3	3546	240	183	7	5
NC GREENSBORO	GSO	21	-4	2	4134	312	236	8	6
NC RALEIGH DURHAM	RDU	9	-11	-8	3744	249	322	7	9
NC WILMINGTON	ILM	0	-7	-7	2581	115	-29	5	-1
ND BISMARCK	BIS	150	67	66	8620	-136	852	-2	11
ND FARGO	FAR	144	43	20	8777	-256	673	-3	8
ND WILLISTON	ISN	143	37	32	8240	-608	239	-7	3
OH AKRON-CANTON	CAK	95	22	32	6117	35	935	1	18
OH CLEVELAND	CLE	97	19	24	6436	457	1298	8	25
OH COLUMBUS	CMH	74	14	29	5914	375	956	7	19
OH CINCINNATI	CVG	65	16	24	5713	579	1207	11	27
OH DAYTON	DAY	63	24	22	5251	596	1129	13	22
OH TOLEDO	TOL	98	18	6	6860	498	1052	8	18
OH YOUNGSTOWN	YNG	85	3	21	6412	97	1167	2	22
OK OKLAHOMA CITY	OKC	30	10	11	4148	438	528	12	15
OK TULSA	TUL	28	12	19	3890	186	412	5	12
OR ASTORIA	AST	119	16	40	4505	-182	747	-4	20
OR BURNS	BNS	152	45	34	7608	1065	866	16	13
OR MEDFORD	MFR	85	11	0	4217	-314	-23	-7	-1
OR PENDLETON	PDT	112	42	35	5206	181	502	4	11
OR PORTLAND	PDX	31	14	35	3939	-436	261	-10	7
OR SALEM	SLE	106	19	29	4109	-473	23	-10	1
PA ALLENTOWN	ABE	56	-9	35	5803	130	713	2	14
PA ERIE	ERI	95	15	12	6215	815	815	14	15
PA HARRISBURG	CXY	55	10	41	5826	604	1094	12	23
PA PHILADELPHIA	PHL	44	-14	37	5206	345	740	7	17
PA PITTSBURGH	PIT	81	15	28	6060	284	866	5	17
PA SCRANTON	AVP	63	-11	37	6126	-21	458	0	8
RI PROVIDENCE	PVD	70	-10	48	5511	-195	530	-3	11
SC CHARLESTON	CHS	0	-4	0	2028	-116	33	-5	2
SC COLUMBIA	CAE	0	-7	-10	2916	303	86	12	3
SC GREENVILLE	GSP	21	7	7	3626	416	354	13	11
SD ABERDEEN	ABR	133	44	24	8011	-281	833	-3	12
SD HURON	HON	130	44	26	7594	-271	880	-3	13
SD RAPID CITY	RAP	172	76	45	6979	-8	654	0	10
SD SIOUX FALLS	FSD	137	52	27	7492	234	694	3	10
TN CHATTANOOGA	CHA	28	7	16	3880	341	473	10	14
TN KNOXVILLE	TYS	48	27	36	3981	368	371	10	10
TN MEMPHIS	MEM	6	-4	-5	3389	199	405	6	13
TN NASHVILLE	BNA	35	14	21	4021	302	627	8	18
TX ABILENE	ABI	5	1	2	2873	265	119	10	4
TX AMARILLO	AMA	48	13	13	4741	575	175	14	4
TX AUSTIN	AUS	0	-1	0	1879	117	-48	7	-2
TX BROWNSVILLE	BRO	0	0	0	866	257	336	42	63
TX CORPUS CHRISTI	CRP	0	0	0	1271	301	252	31	25
TX DEL RIO	DRT	0	0	0	1730	220	209	15	14
TX EL PASO	ELP	22	21	12	2504	-160	-344	-6	-12
TX FORT WORTH	DFW	10	9	8	2835	531	302	23	12
TX GALVESTON	GLS	0	0	0	1429	175	187	14	15
TX HOUSTON	IAH	0	-1	0	1847	297	173	19	10
TX LUBBOCK	LBB	18	3	2	2616	123	-265	4	-7
TX MIDLAND ODESSA	MAF	0	-7	-4	2866	208	6	8	0
TX SAN ANGELO	SJT	0	-5	-2	2646	334	130	14	5
TX SAN ANTONIO	SAT	0	0	0	1879	271	36	17	2
TX VICTORIA	VCT	0	0	0	1476	202	155	16	12
TX WACO	ACT	6	5	5	2493	368	204	17	9
TX WICHITA FALLS	SPS	16	9	9	3431	430	363	14	12
UT SALT LAKE CITY	SLC	96	23	7	5676	85	294	2	5
VT BURLINGTON	BTV	114	10	52	7443	-208	814	-3	12
VA LYNCHBURG	LYN	25	-10	7	4441	192	436	5	11
VA NORFOLK	ORF	7	-16	2	3579	167	360	5	11
VA RICHMOND	RIC	12	-15	2	4244	326	722	8	20
VA ROANOKE	ROA	29	-6	7	4427	193	218	5	5
WA QUILLAYUTE	UIL	130	18	33	5120	-185	252	-3	5
WA SEATTLE-TACOMA	SEA	108	20	35	4390	-324	318	-7	8
WA SPOKANE	GEG	152	54	56	6350	-136	435	-2	7
WA WALLA WALLA	ALW	95	38	47	4731	107	620	2	15
WA YAKIMA	YKM	121	43	62	5659	-81	467	-1	9
WV BECKLEY	BKW	66	6	29	5699	315	676	6	13
WV CHARLESTON	CRW	37	-5	12	4718	125	556	3	13
WV HUNTINGTON	HTS	35	-8	7	4808	238	718	5	18
WV PARKERSBURG	PKB	43	-5	14	4942	96	690	2	16
WI GREEN BAY	GRB	147	47	16	7867	54	677	1	9
WI LACROSSE	LSE	133	62	46	7619	258	697	4	10
WI MADISON	MSN	133	47	13	7625	238	666	3	10
WI MILWAUKEE	MKE	117	17	-16	6968	-31	705	0	11
WY CASPER	CPR	165	47	21	7542	318	688	4	10
WY CHEYENNE	CYS	167	48	28	7506	630	625	9	9
WY LANDER	LND	167	50	28	8222	728	769	10	10
WY SHERIDAN	SHR	191	79	74	7189	-228	783	-3	12


HEATING DEGREE-DAYS FOR THE WEEK
PERCENT DEPARTURE FROM NORMAL (1951-1980)
ABOVE
ABOVE NORMAL
BELOW NORMAL
APR 29 MAY 5 1984
BASED ON PRELIMINARY TELEGRAPHIC REPORTS
Dept.of Commerce - NOAA


HEATING DEGREE-DAYS ACCUMULATED FROM JULY 1, 1983
PERCENT DEPARTURE FROM NORMAL (1951-1980)
BELOW
ABOVE
BELOW NORMAL
ABOVE NORMAL
SAT MAY 5 1984
BASED ON PRELIMINARY TELEGRAPHIC REPORTS
Dept.of Commerce - NOAA


HEATING DEGREE-DAYS ACCUMULATED FROM JULY 1, 1983
PERCENT DEPARTURE FROM 1982-83
ABOVE
BELOW
SAT MAY 5 1984
BASED ON PRELIMINARY TELEGRAPHIC REPORTS
Dept.of Commerce - NOAA

April Weather and Crop Summary

WEATHER SUMMARY

HIGHLIGHTS: Cool, wet weather dominated much of the Nation throughout the month. Average temperatures for the month were 4 to 8 degrees colder than normal from the central Rockies into the lower Ohio Valley, and from the central Plains to the southern and central Appalachians. Temperatures were warmer than normal through the northern tier of States and into Canada. Precipitation was twice the normal amount in much of the central Rockies, the central Plains, and the northern part of the northern Plains. Above normal amounts covered most of the East and the Northwest. It was a very dry month for most of Texas, the Southwest, and California. Most of southern and southwestern Texas had little or no rain, but the northern part of the Panhandle had several episodes of shower activity. It remained dry from south-central to northeastern Montana, but the southeastern part of the State had some heavy snow.

FIRST WEEK...A storm system deepened and spread snow through the central Rockies and then over the central Plains. Showers and thunderstorms developed ahead of the storm from northeastern New Mexico to Iowa and then spread eastward. At midweek cold weather began to move over the Plains and freezing temperatures reached into the Texas Panhandle. The thunderstorms were accompanied by heavy rains and reached all the way to the east coast where local flooding occurred in parts of Pennsylvania and New York. Average temperatures were much cooler than normal from the central Plains through the Southeast, but were mild in the Northwest and northern tier of States.

SECOND WEEK...Storms moved across the Southeast early in the week and triggered thunderstorms from eastern Texas to Georgia and the Carolinas. Some of the storms were accompanied by flood producing downpours and severe weather. Later, the storms moved along a more northerly track and produced heavy thunderstorms from Iowa through North Dakota, and less severe showers eastward to the Atlantic Coast. Some heavy thunderstorms occurred from Virginia to southern New York. No rain fell from most of Texas through the Southwest. Although North Dakota recorded heavy showers, eastern Montana saw little or no precipitation. Temperatures were still unseasonably cool from the central Rockies and Plains to the Southeast and along the east coast.

THIRD WEEK...Cool, wet weather dominated the area from the central Plains to the east coast. At midweek a line of thunderstorms, originating in the lower Mississippi Valley, triggered tornadoes and other severe weather and moved eastward to Georgia. Another winterlike storm spread heavy snow from Colorado into Nebraska and Kansas, and thunderstorms from Missouri into Illinois. Little or no rain fell from the western gulf coast to California. High wind kicked up dust in New Mexico and Texas and further depleted soil moisture. Average temperatures were 7 to 9 degrees cooler than normal in the central Plains and from the Ohio Valley to the Southeast. It was warmer than normal from the Southwest through the northern Rockies and Plains.

FOURTH WEEK...Showers fell through the Midwest and along the east coast. A cold outbreak dropped temperatures to near freezing in much of the central and northern Plains, and early morning temperatures were below freezing in the Texas Panhandle. At midweek, another strong spring storm spread snow through the central and northern Rockies and then a near blizzard occurred from Wyoming through the Dakotas. This time the storm dropped heavy snow over southeastern Montana, but again missed the very dry northeastern portion. Warm air ahead of the storm triggered severe weather, heavy thunderstorms, and numerous rainshowers from Oklahoma to the Great Lakes and then eastward to the Appalachians. Much colder than normal temperatures pushed southward behind the storm through the central Plains. Southerly winds ahead of the storm brought unseasonably warm temperatures to an area from southern Texas to the Great Lakes region.

The last 2 days of the month brought heavy showers and thunderstorms from the eastern portion of the central Plains into the Great Lakes region, and lighter showers through the Ohio Valley and the lower Mississippi Valley.

APRIL FIELDWORK

Land preparation and planting was slowed by untimely rains and saturated soils from the central Plains to the east coast during most of April. The Corn Belt and Southeast were the hardest hit as cool, damp weather stalled fieldwork for much of the month leaving farm activities mostly one week behind schedule as the month ended. All regions had adequate to surplus soil moisture available for crop development except from California through Texas and in portions of Montana where supplies were mostly short. Abnormally cool temperatures covered most of the Nation east of the Rocky Mountains for much of the month retarding growth and development of all crops. Late in April, a blizzard severely stressed livestock, causing some losses in the northern Rockies and Plains, but brought beneficial moisture to wheat. At the month's end, high winds depleted soil moisture and eroded topsoils from California through the southern Plains.

Corn planting, at the beginning of April, lagged normal across the South except in Alabama, Louisiana, and Texas. Wet conditions continued to hamper progress in most regions throughout the month. By April 28, 5 percent of the acreage had been seeded in the 17 major producing States, compared with 8 percent last year and 13 percent average. Most States trailed their normal progress for this date. Planting was underway in all States except Michigan, Nebraska, Pennsylvania, and South Dakota.

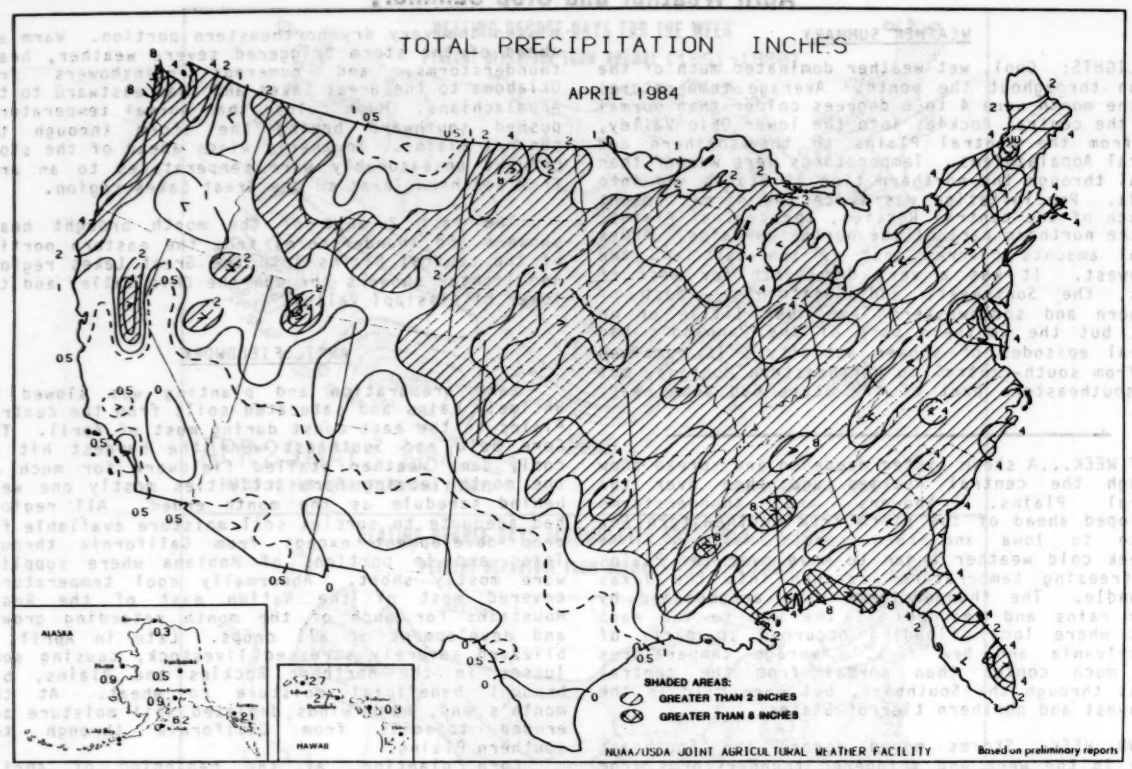
Sorghum planting moved northward into Missouri and Oklahoma, although most activity centered in Texas. Planting in Texas was 62 percent finished by April 28, 3 points behind normal.

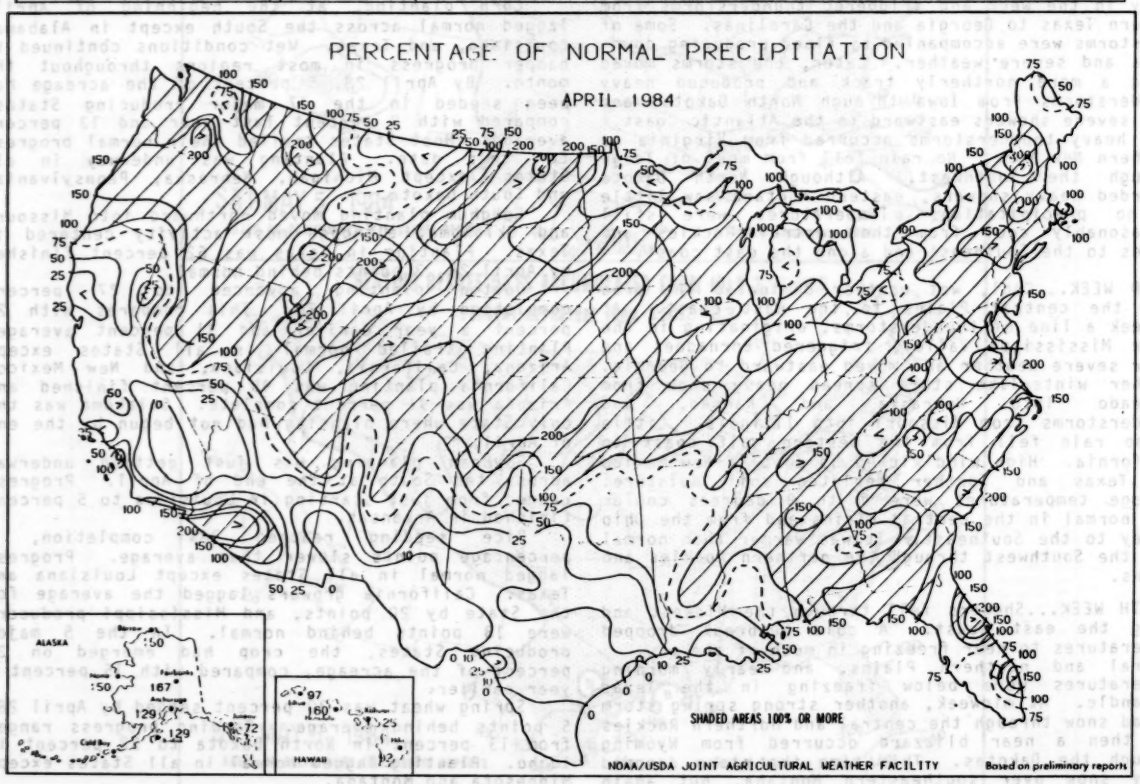
Cotton planting advanced to 27 percent completion by April 28. This compares with 22 percent a year earlier and 31 percent average. Planting trailed normal in all States except Arizona, California, Louisiana, and New Mexico. California planting was 95 percent finished and Arizona was 91 percent complete. Oklahoma was the only State where planting had not begun by the end of April.

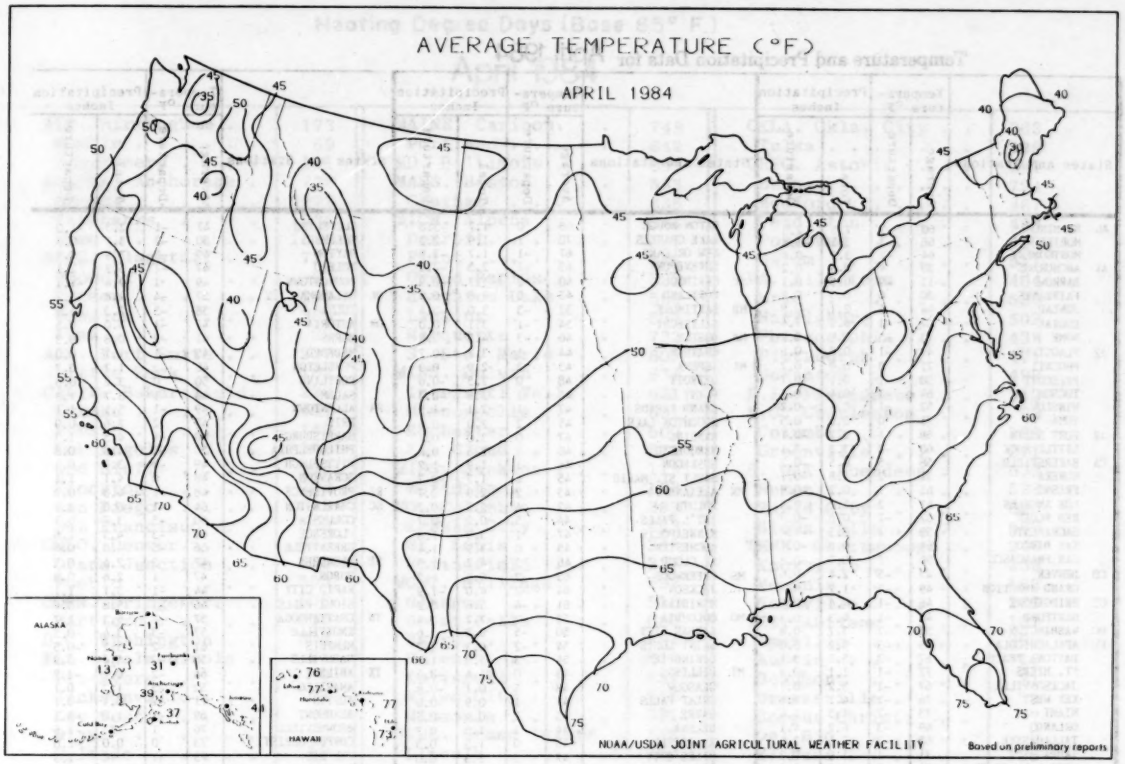
Soybean planting was just getting underway across the South at the end of April. Progress ranged from just starting in Louisiana to 5 percent finished in Arkansas.

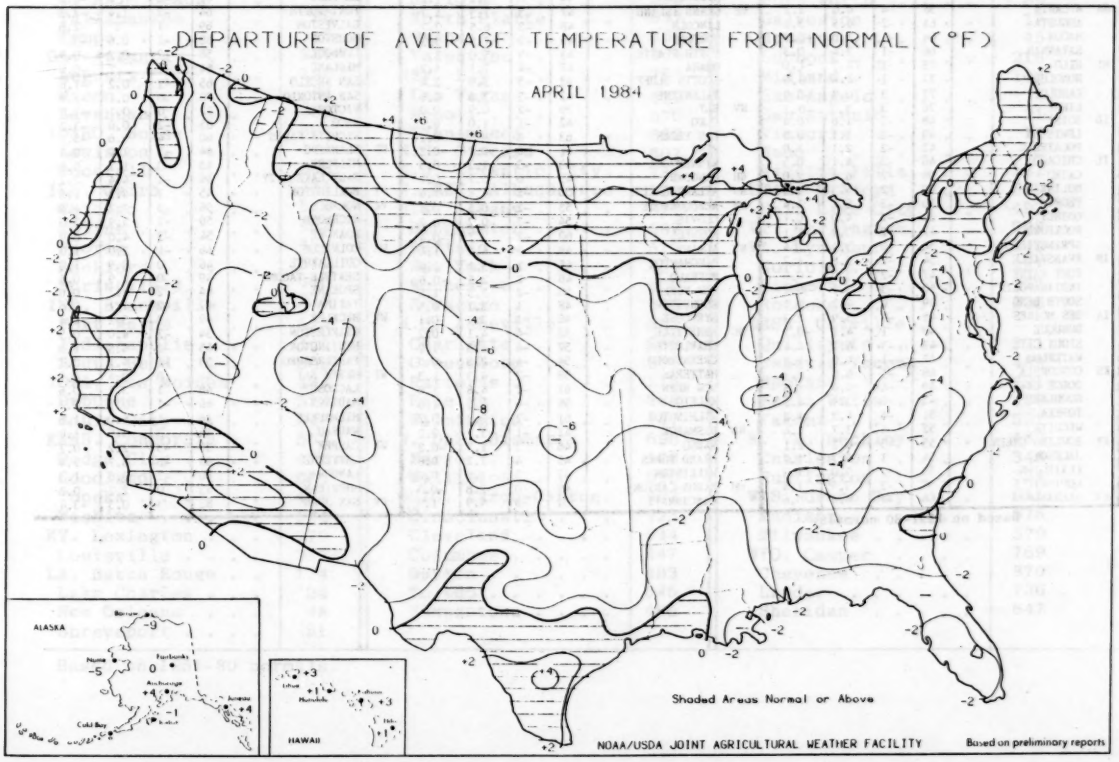
Rice seeding reached 38% completion, 6 percentage points slower than average. Progress lagged normal in all States except Louisiana and Texas. California growers lagged the average for the State by 20 points, and Mississippi producers were 18 points behind normal. In the 5 major producing States, the crop had emerged on 21 percent of the acreage, compared with 15 percent a year earlier.

Spring wheat was 30 percent seeded by April 28, 5 points behind average. Seeding progress ranged from 13 percent in North Dakota to 52 percent in Idaho. Planting lagged normal in all States except Minnesota and Montana.


TOTAL PRECIPITATION INCHES
APRIL 1984
ALASKA
HAWAII
SHADED AREAS:
GREATER THAN 2 INCHES
GREATER THAN 8 INCHES
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


PERCENTAGE OF NORMAL PRECIPITATION
APRIL 1984
ALASKA
HAWAII
SHADED AREAS 100% OR MORE
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


AVERAGE TEMPERATURE (°F)
APRIL 1984
ALASKA
HAWAII
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


DEPARTURE OF AVERAGE TEMPERATURE FROM NORMAL (°F)
APRIL 1984
ALASKA
HAWAII
Shaded Areas Normal or Above
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

Temperature and Precipitation Data for April 1984

States and Stations	Temperature °F Average	Temperature °F Departure	Precipitation Inches Total	Precipitation Inches Departure
AL BIRMINGHAM	60	-3	7.5	2.5
MOBILE	66	-3	3.5	-1.8
MONTGOMERY	64	-2	3.5	-0.8
AK ANCHORAGE	39	4	0.9	0.2
BARROW	-11	-9	0.3	0.1
FAIRBANKS	30	0	0.5	0.2
JUNEAU	44	5	2.1	-0.8
KODIAK	37	-1	6.2	1.4
NOME	13	-5	0.9	0.2
AZ FLAGSTAFF	41	-1	0.8	-0.6
PHOENIX	71	3	0.9	0.7
PRESCOTT	50	1	0.1	-0.7
TUCSON	64	-1	0.4	0.1
WINSLOW	52	-1	0.1	-0.2
YUMA	71	0	0.6	0.5
AR FORT SMITH	58	-4	2.2	-2.1
LITTLE ROCK	60	-3	3.2	-2.1
CA BAKERSFIELD	58	-5	0.5	-0.2
EUREKA	51	2	2.8	-0.1
FRESNO	61	1	0.2	-0.9
LOS ANGELES	61	2	1.2	0.3
RED BLUFF	57	-2	0.6	-0.4
SACRAMENTO	59	1	0.3	-1.0
SAN DIEGO	64	3	0.6	-0.1
SAN FRANCISCO	56	1	0.7	-0.4
CO DENVER	42	-5	2.4	0.6
GRAND JUNCTION	49	-3	1.2	0.3
CT BRIDGEPORT	48	-1	4.4	0.7
HARTFORD	48	-1	4.3	0.3
DC WASHINGTON	55	-2	3.7	0.8
FL APALACHICOLA	65	-3	9.2	6.0
DAYTONA BEACH	67	-3	5.3	3.1
FT. MYERS	72	-1	1.1	-0.4
JACKSONVILLE	67	-1	3.2	-0.1
KEY WEST	76	-1	4.2	2.6
MIAMI	73	-2	4.5	1.4
ORLANDO	69	-3	6.2	4.1
TALLAHASSEE	65	-2	7.5	3.4
TAMPA	71	-1	1.5	-0.3
WEST PALM BEACH	71	-3	6.0	2.8
GA ATLANTA	58	-4	6.6	2.2
AUGUSTA	61	-2	6.5	3.2
MACON	64	-1	3.0	-0.5
SAVANNAH	66	-1	3.4	0.3
HI HILO	73	1	12.7	-1.0
HONOLULU	77	1	2.4	0.9
KAHULUI	77	3	0.3	-0.9
LIHUE	76	3	3.2	-0.1
ID BOISE	46	-3	1.6	0.4
LEWISTON	49	-2	1.1	0.0
POCATELLO	43	-2	2.1	1.0
IL CHICAGO	46	-3	4.1	0.5
CAIRO	58	-2	6.4	2.0
MOLINE	49	-2	4.3	0.3
PEORIA	50	-2	5.2	1.4
QUINCY	51	-2	4.0	0.1
ROCKFORD	47	-2	3.1	-1.1
SPRINGFIELD	50	-3	5.4	1.4
IN EVANSVILLE	54	-2	5.8	1.7
FORT WAYNE	47	-2	3.0	-0.6
INDIANAPOLIS	50	-3	3.9	0.2
SOUTH BEND	49	0	4.2	0.1
IA DES MOINES	49	-2	5.9	2.7
DUBUQUE	48	1	4.1	-0.1
SIOUX CITY	47	-3	6.7	4.4
WATERLOO	47	-1	4.9	1.3
KS CONCORDIA	48	-5	6.0	3.7
DODGE CITY	49	-6	4.4	2.5
GOODLAND	43	-6	3.4	2.2
TOPEKA	51	-4	4.3	1.2
WICHITA	52	-4	3.7	1.4
KY BOWLING GREEN	55	-3	6.2	2.1
JACKSON	54	1	5.7	1.7
LEXINGTON	53	-2	5.0	1.0
LOUISVILLE	55	-2	5.5	1.4
LA ALEXANDRIA	66	-1	4.8	-0.6
BATON ROUGE	68	0	1.7	-3.8
LAKE CHARLES	70	1	1.9	-2.2
NEW ORLEANS	67	-1	1.7	-2.8
SHREVEPORT	65	-1	2.5	-2.2
ME CARIBOU	40	2	1.7	-0.9
PORTLAND	43	0	4.8	0.9
MD BALTIMORE	52	-3	3.0	-0.4
SALISBURY	54	-1	3.1	0.0
MA BOSTON	46	-3	4.5	0.8
CHATHAM	44	-1	3.2	-0.7
MI ALPENA	43	3	2.9	0.3
DETROIT	48	0	2.5	-0.6
FLINT	45	-1	2.8	-0.3
GRAND RAPIDS	47	1	2.1	-1.5
HOUGHTON LAKE	45	2	2.0	-0.6
LANSING	47	0	3.0	0.1
MARQUETTE	40	2	2.5	0.0
MUSKEGON	46	1	1.9	-1.2
SAULT ST. MARIE	45	6	1.7	-0.7
MN ALEXANDRIA	45	2	2.9	0.7
DULUTH	42	4	2.3	0.2
INT'L FALLS	44	5	0.9	-0.7
MINNEAPOLIS	47	1	3.9	1.8
ROCHESTER	45	0	3.9	1.4
ST CLOUD	46	3	4.2	1.9
MS GREENWOOD	63	-2	6.8	1.3
JACKSON	64	-2	4.0	-1.9
MERIDIAN	61	-4	5.6	0.2
MO COLUMBIA	53	-2	7.2	3.4
KANSAS CITY	50	-5	6.8	3.6
SAINT LOUIS	54	-2	6.3	2.7
SPRINGFIELD	54	-3	5.0	1.0
MT BILLINGS	45	0	1.4	-0.5
GLASGOW	48	5	0.1	-0.8
GREAT FALLS	44	1	0.9	-0.6
HAVRE	45	2	0.4	-0.7
HELENA	44	1	1.5	0.7
KALISPELL	43	0	1.5	0.5
MILES CITY	47	2	1.3	0.0
MISSOULA	44	0	2.2	1.2
NE GRAND ISLAND	47	-3	7.3	4.7
LINCOLN	48	-3	6.5	3.7
NORFOLK	46	-3	7.5	5.3
NORTH PLATTE	43	-5	5.0	3.1
OMAHA	47	-4	7.1	4.2
SCOTTS BLUFF	42	-5	3.9	2.4
VALENTINE	43	-3	3.4	1.6
NV ELY	39	-2	0.9	0.0
ELKO	42	-1	1.0	0.2
LAS VEGAS	63	0	T	-0.2
RENO	46	0	0.2	-0.2
WINNEMUCCA	43	-3	1.3	0.5
NH CONCORD	45	0	3.7	0.7
NJ ATLANTIC CITY	50	-2	4.8	1.6
NM ALBUQUERQUE	53	-2	0.5	0.1
CLOVIS	54	-3	0.2	-0.7
ROSWELL	60	-2	T	-0.4
NY ALBANY	48	1	4.3	1.4
BINGHAMTON	45	1	5.1	2.0
BUFFALO	48	2	2.5	-0.6
NEW YORK	50	-2	5.3	1.5
ROCHESTER	48	1	3.1	0.5
SYRACUSE	46	-1	3.2	-0.1
NC ASHEVILLE	52	-4	4.1	0.2
CHARLOTTE	57	-4	4.5	1.2
GREENSBORO	54	-4	2.8	-0.3
HATTERAS	58	-2	4.3	1.3
NEW BERN	61	-1	4.8	1.8
RALEIGH	56	-4	4.5	1.6
WILMINGTON	61	-2	3.2	0.2
ND BISMARCK	42	-1	3.7	2.2
FARGO	46	3	1.7	-0.2
GRAND FORKS	45	4	2.2	0.8
WILLISTON	47	5	1.5	0.2
OH AKRON-CANTON	49	0	2.8	-0.5
CINCINNATI	51	-3	4.9	1.3
CLEVELAND	47	-1	2.3	-1.0
COLUMBUS	50	-2	3.1	-0.3
DAYTON	49	-3	3.9	0.5
TOLEDO	47	-1	5.2	2.1
YOUNGSTOWN	49	1	2.4	-1.1
OK OKLAHOMA CITY	57	-4	1.8	-1.2
TULSA	58	-3	2.3	-1.7
OR ASTORIA	47	-1	5.0	0.5
BURNS	41	-2	0.8	0.3
MEDFORD	49	-1	1.1	0.0
PENDLETON	48	-2	1.7	0.7
PORTLAND	50	0	3.2	0.8
SALEM	48	-1	3.7	1.3
PA ALLENTOWN	49	-1	5.1	1.1
ERIE	47	2	2.6	-0.9
HARRISBURG	48	-4	4.5	1.3
PHILADELPHIA	50	-3	4.3	0.8
PITTSBURGH	49	-1	3.7	0.4
SCRANTON	48	0	4.1	1.1
RI PROVIDENCE	48	-1	4.3	0.3
SC CHARLESTON	64	-1	6.3	3.7
COLUMBIA	60	-5	3.7	0.1
FLORENCE	61	-3	4.5	1.6
GREENVILLE	56	-5	4.8	0.5
SD ABERDEEN	47	2	2.4	0.5
HURON	47	1	2.8	0.8
RAPID CITY	44	-1	3.1	1.1
SIOUX FALLS	46	-1	5.8	3.4
TN CHATTANOOGA	57	-4	6.3	1.7
KNOXVILLE	57	-3	3.4	-0.5
MEMPHIS	61	-2	5.2	-0.5
NASHVILLE	58	-2	8.4	3.9
TX ABILENE	64	-2	0.2	-2.2
AMARILLO	52	-5	1.2	0.1
AUSTIN	71	2	0.1	-3.1
BEAUMONT	69	-1	1.0	-3.1
BROWNSVILLE	76	1	T	-1.6
CORPUS CHRISTI	73	0	0.0	-2.0
DEL RIO	73	1	.6	-1.3
EL PASO	62	-2	0	-0.2
FORT WORTH	64	-2	1.4	-2.3
GALVESTON	69	-1	T	-2.6
HOUSTON	68	-1	0.6	-3.7
LUBBOCK	58	-2	0.2	-0.9
MIDLAND	64	-1	T	-0.9
SAN ANGELO	65	-2	0.2	-1.6
SAN ANTONIO	70	0	0.1	-2.7
VICTORIA	72	0	0.1	-2.6
WACO	65	-2	0.6	-3.2
WICHITA FALLS	60	-4	0.6	-3.2
UT BLANDING	44	-3	1.0	0.4
MILFORD	43	-3	1.1	0.1
SALT LAKE CITY	49	-1	4.4	2.2
VT BURLINGTON	45	1	4.3	1.5
VA NORFOLK	56	-3	7.2	4.4
RICHMOND	56	-2	5.9	3.0
ROANOKE	54	-3	4.0	0.9
WA COLVILLE	46	-1	2.0	1.0
QUILLAYUTE	46	0	8.9	1.8
SEATTLE-TACOMA	49	0	2.9	0.5
SPOKANE	44	-2	1.7	0.6
YAKIMA	47	-2	1.1	0.6
WV BECKLEY	49	-3	3.2	-0.4
CHARLESTON	54	-2	4.0	0.5
HUNTINGTON	55	-2	4.5	1.0
PARKERSBURG	53	-1	4.1	0.7
WI GREEN BAY	44	0	3.4	0.7
LACROSSE	48	1	3.7	0.6
MADISON	46	-1	3.9	0.7
MILWAUKEE	46	1	5.0	1.6
WAUSAU	46	3	3.9	1.0
WY CASPER	39	-3	2.2	0.7
CHEYENNE	36	-6	3.7	2.4
LANDER	40	-2	3.6	1.3
SHERIDAN	43	0	2.2	0.2
PR SAN JUAN	82	3	0.3	-3.4

Based on 1951-80 normals.

Heating Degree Days (Base 65° F.)

April 1984

ALA. Birmingham	173	MAINE, Caribou	748	OKLA. Okla. City	263
Mobile	69	Portland	642	Tulsa	229
Montgomery	111	MD. Baltimore	397	OREG. Astoria	541
ALASKA, Anchorage	778	MASS. Boston	563	Burns	724
Barrow	2273	Chatham	635	Medford	467
Fairbanks	1035	MICH. Alpena	644	Pendleton	496
Nome	1575	Detroit	507	Portland	430
ARIZ. Flagstaff	722	Flint	586	Salem	511
Phoenix	23	Grand Rapids	532	PA. Allentown	464
Tucson	110	Houghton Lake	599	Erie	539
Winslow	388	Lansing	554	Harrisburg	502
Yuma	22	Marquette	733	Philadelphia	438
ARK. Fort Smith	227	S. Ste. Marie	608	Pittsburgh	471
Little Rock	182	MINN. Duluth	671	Scranton	493
CALIF. Bakersfield	226	Internatl Falls	621	R.I. Providence	512
Eureka	403	Minneapolis	531	S.C. Charleston	93
Fresno	149	Rochester	600	Columbia	190
Los Angeles	117	St. Cloud	571	Greenville	271
Red Bluff	246	MISS. Jackson	113	S. DAK. Aberdeen	533
Stockton	203	Meridian	173	Huron	528
San Diego	43	MO. Columbia	383	Rapid City	626
San Francisco	269	Kansas City	443	Sioux Falls	569
COLO. Denver	673	St. Louis	342	TENN. Chattanooga	246
Grand Junction	315	Springfield	337	Knoxville	239
Pueblo	505	MONT. Billings	592	Memphis	162
CONN. Bridgeport	508	Glasgow	515	Nashville	220
Hartford	503	Great Falls	620	TEX. Abilene	107
D.C. Washington	302	Havre	593	Amarillo	390
FLA. Apalachicola	63	Helena	640	Austin	16
Ft. Myers	0	Kalispell	657	Beaumont	31
Jacksonville	57	Miles City	547	Brownsville	2
Key West	0	Missoula	631	Corpus Christi	7
Miami	0	NEBR. Grand Island	521	Del Rio	9
Orlando	18	Lincoln	496	El Paso	126
W. Palm Beach	4	Norfolk	563	Fort Worth	89
Tallahassee	80	North Platte	647	Galveston	17
Tampa	5	Omaha	538	Houston	45
GA. Atlanta	221	Valentine	664	Lubbock	216
Augusta	146	NEV. Ely	764	Midland	100
Macon	94	Las Vegas	111	San Angelo	74
Savannah	68	Reno	570	San Antonio	21
IDAHO, Boise	566	Winnemucca	663	Victoria	17
Lewiston	471	N.H. Concord	607	Waco	73
Pocatello	658	N.J. Atlantic City	481	Wichita Falls	181
ILL. Cairo	231	N. MEX. Albuquerque	362	UTAH, Milford	650
Chicago	575	N.Y. Albany	517	Salt Lake City	493
Moline	482	Binghamton	588	VT. Burlington	602
Peoria	467	Buffalo	519	VA. Lynchburg	348
Rockford	542	New York	436	Norfolk	281
Springfield	446	Rochester	520	Richmond	282
IND. Evansville	329	Syracuse	563	Roanoke	336
Fort Wayne	524	N.C. Asheville	391	WASH. Colville	
Indianapolis	447	Charlotte	266	Quillayute	571
South Bend	503	Greensboro	331	Seattle-Tacoma	482
IOWA, Des Moines	488	Hatteras	215	Spokane	621
Dubuque	513	Raleigh	283	Walla Walla	408
Souix City	543	Wilmington	147	Yakima	531
KANS. Concordia	503	N. DAK. Bismarck	690	W. VA. Beckley	483
Dodge City	473	Fargo	576	Charleston	346
Goodland	664	Williston	520	Huntington	324
Topeka	405	OHIO. Akron-Canton	493	WIS. Green Bay	611
Wichita	394	Cinncinnati	425	Madison	575
KY. Lexington	370	Cleveland	544	Milwaukee	579
Louisville	315	Columbus	447	WYO. Casper	769
LA. Baton Rouge	174	Dayton	493	Cheyenne	870
Lake Charles	24	Toledo	545	Lander	736
New Orleans	48	Youngstown	486	Sheridan	647
Shreveport	81				

Based on 1951-80 normals.

National Agricultural Summary

April 30 to May 6

HIGHLIGHTS: Widespread showers across the eastern half of the Nation continued to delay land preparation and planting. Heavy rain brought field activities to a standstill from eastern portions of the central Plains northeastward through Wisconsin and across most of the Delta States into the Southeast. Producers had less than 2 days suitable for fieldwork in the western Corn Belt and across much of the South. In the Southwest, up to 7 days were suitable for field activities, while elsewhere farmers had 3 to 5 days available. Soil moisture continued short in portions of Montana and from southern California through west Texas. Elsewhere, supplies remained adequate to surplus. Growth and development of crops was stalled by abnormally cool temperatures across much of the northern half of the Nation.

Wet conditions left planting progress generally a week behind schedule and up to 2 weeks behind normal in portions of the Corn Belt and the Tennessee Valley. Corn planting in the 17 major producing States reached only 10% completion, 21 percentage points behind normal. Sorghum was 23% planted in the seven major States, lagging the 25% average. Cotton producers had planted 31% of the acreage, compared with the 41% average. Soybean planting was 1% finished, one-fifth the normal pace. Spring wheat seeding advanced to 45% completion, 9 points behind normal; 10% of the acreage had emerged. Winter wheat stands were 11% headed, half the average development for this date. Rice seeding at 51% complete, trailed the 60% average. The crop had emerged on 29% of the acreage. Fruit crops continued to develop normally across northern producing areas. Vegetable planting and harvesting crept northward. Pastures and ranges were rated fair to mostly good, except in the Southwest where dry conditions left ranges in poor condition. Movement of livestock to market was heavy in Texas because of limited grass growth.

SMALL GRAINS: In the 15 major winter wheat producing States, 11% of the stands were headed, half the average. The crop was beginning to turn color across the extreme South, reaching 9% turned in Texas. Winter wheat was in mostly fair to good condition across the major producing area.

Wheat development was slow in Kansas because of cooler than normal temperatures. Stands were fair to good, except in the northwest and portions of the north-central and west-central regions where conditions were poor. Disease infestations were still a problem in central areas and the eastern third of the State. In Oklahoma, light showers improved wheat prospects but sunshine and warmer temperatures are needed. Fields in southwestern areas showed moisture stress. Weeds and soil borne mosaic continue to plague producers in northern portions of the State. Scattered showers helped wheat in the Northern High Plains of Texas but rain was needed elsewhere. Harvesting moved into central Texas with low yields reported. A significant amount of wheat was being baled statewide because of low yields. Wheat was turning color in the Cross Timbers area.

Spring wheat seeding was 45% finished in the five major States, compared with 53% last year and the 54% average. Seeding progress ranged from 23% complete in North Dakota to 75% in Montana. Progre s was behind normal in all States except Montana.

CORN: Corn planting in the 17 major producing States reached 10%, 7 points behind a year earlier and 21 points behind average. Planting was 6% finished in the Corn Belt and 73% complete in the Southeast. Rain halted fieldwork in most areas of the Corn Belt, Delta States, and Southeast for much of the week. Progress ranged from 1% planted in South Dakota to 93% in Georgia. All States trailed normal planting progress for this date. Emerged plants across the South were in mostly fair condition because of the excess moisture.

SORGHUM: In the seven major sorghum producing States, 23% of the crop was planted, 2 points behind normal. Planting was limited to Missouri, Oklahoma, and Texas. Planting progress was behind normal in all States. Texas producers planted 64% of the crop, 3 points behind last year. Stands were stressed by dry conditions in many areas of Texas.

COTTON: Cotton planting was slowed by wet conditions across much of the southeastern quarter of the Nation. Planting reached 31% completion in the 14 major producing States, 3 points behind last year and 10 points slower than normal. Planting progress ranged from 1% finished in Oklahoma to complete in California. Four percent of the early planted stands were squaring in Texas.

SOYBEANS: Soybean planting at 1% completion was one-fifth the normal progress for this date. Planting had not begun in portions of the central Plains and Corn Belt. Progress was behind schedule in all States except Louisiana and Nebraska.

OTHER CROPS: Rice seeding in the five major States reached 51% completion, 9 points behind average. Rice had emerged on 29% of the acreage, compared with the 38% average. Planting ranged from 15% complete in California to complete in Texas.

Peanut planting trailed normal in all States except Alabama. Progress ranged from 9% finished in Texas to 50% complete in Alabama.

Tobacco transplanting was slowed by frequent showers. Progress ranged from 3% transplanted in Virginia to 98% in Georgia.

FRUITS AND NUTS: Apple orchards reached peak bloom, and strawberries and blueberries were coming into bloom in New Jersey. New York apple orchards were approaching the bloom stage. Producers continued thinning fruit crops in the Pacific Northwest. Harvesting of early peaches began in southern Georgia.

Florida's citrus groves were irrigated in most areas. Grapefruit supplies were diminishing while Valencia orange picking increased.

Arizona's grapefruit harvest reached the halfway mark, while Valencia orange picking was 75% complete.

Navel orange picking was virtually complete in California but Valencia orange harvesting was increasing. High winds caused some damage to almond orchards. Growers harvested Burlat cherries. Stone fruit maturity was slowed by recent cool weather, but development generally continued ahead of normal.

VEGETABLES: Seeding of midseason vegetables and harvesting of early season crops moved into northern producing areas.

Vegetable shipments rose 29% over the previous week in Florida. The only crops showing declines were cauliflower, Chinese cabbage, lettuce, and squash. Potato digging neared peak levels in the Hastings area.

High winds damaged some vegetable crops in portions of Texas. Producers continued heavy irrigation to prevent moisture stress. Growers harvested spring onions, cabbage, and carrots. Arizona growers harvested good volumes of lettuce, cabbage, greens, carrots, broccoli, and onions in the Salt River Valley.

(continued on p. 17)

CROP PROGRESS

FOR WEEK ENDING MAY 6, 1984

SOYBEANS
% PLANTED

	1984	1983	AVG.
ALA	3	5	5
ARK	3	3	6
GA	7	7	12
ILL	0	0	5
IND	1	0	3
IOWA	0	1	2
KANS	0	0	2
KY	0	0	4
LA	4	3	4
MICH	0	0	1
MINN	0	0	3
MISS	2	1	4
MO	0	0	8
NEBR	0	0	0
N C	2	2	9
OHIO	1	0	5
S C	1	2	7
TENN	1	1	4
18 STATES	1	1	5

THESE 18 STATES PRODUCED 93% OF THE 1983 SOYBEAN CROP.

WINTER WHEAT
% HEADED

	1984	1983	AVG.
CALIF	90	75	88
COLO	0	0	0
IDAHO	0	0	0
ILL	0	2	10
IND	0	0	5
KANS	1	1	15
MO	2	4	19
MONT	0	0	0
NEBR	0	0	2
OHIO	0	0	0
OKLA	20	25	50
OREG	0	0	0
S DAK	0	0	0
TEX	42	44	51
WASH	0	0	0
15 STATES	11	12	22

THESE 15 STATES PRODUCED 84% OF THE 1983 WINTER WHEAT CROP.

CORN
% PLANTED

	1984	1983	AVG.
COLO	9	12	30
GA	93	92	95
ILL	7	18	38
IND	5	10	30
IOWA	6	23	36
KANS	10	15	35
KY	15	6	39
MICH	10	4	15
MINN	8	12	26
MO	12	18	39
NEBR	2	10	25
N C	72	57	76
OHIO	6	15	25
PA	8	7	16
S DAK	1	1	9
VA	48	53	60
WIS	3	8	9
17 STATES	10	17	31

THESE 17 STATES PRODUCED 90% OF THE 1983 CORN CROP.

SPRING WHEAT
% PLANTED

	1984	1983	AVG.
IDAHO	67	77	78
MINN	59	55	60
MONT	75	75	60
N D	23	35	41
S DAK	48	74	76
5 STATES	45	53	54

THESE 5 STATES PRODUCED 94% OF THE 1983 SPRING WHEAT CROP.

SPRING WHEAT
% EMERGED

	1984	1983	AVG.
IDAHO	32	34	44
MINN	9	10	27
MONT	25	20	20
N D	3	3	15
S DAK	7	18	46
5 STATES	10	11	24

THESE 5 STATES PRODUCED 94% OF THE 1983 SPRING WHEAT CROP.

SORGHUM
% PLANTED

	1984	1983	AVG.
COLO	0	0	0
KANS	0	0	2
MO	4	2	13
NEBR	0	0	2
OKLA	3	10	5
S DAK	0	0	1
TEX	64	67	66
7 STATES	23	24	25

THESE 7 STATES PRODUCED 85% OF THE 1983 SORGHUM CROP.

COTTON
% PLANTED

	1984	1983	AVG.
ALA	40	53	64
ARIZ	96	94	92
ARK	10	33	44
CALIF	100	90	96
GA	38	49	71
LA	32	45	42
MISS	16	45	48
MO	7	13	37
N MEX	57	35	50
N C	27	45	61
OKLA	1	10	3
S C	58	78	84
TENN	5	7	39
TEX	17	14	21
14 STATES	31	34	41

THESE 14 STATES PRODUCED 99% OF THE 1983 COTTON CROP.

RICE
% PLANTED

	1984	1983	AVG.
ARK	38	28	48
CALIF	15	4	42
LA	76	68	78
MISS	36	44	59
TEX	100	89	93
5 STATES	51	42	60

THESE 5 STATES PRODUCED 98% OF THE 1983 RICE CROP.

RICE
% EMERGED

	1984	1983	AVG.
ARK	10	7	25
CALIF	0	0	8
LA	64	54	69
MISS	20	10	28
TEX	76	62	71
5 STATES	29	23	38

THESE 5 STATES PRODUCED 98% OF THE 1983 RICE CROP.

(continued from p. 16)

High winds damaged some melon and tomato crops in California's Desert and San Joaquin Valley. Growers harvested a wide variety of vegetables in moderate to heavy volumes. Lettuce cutting neared completion in the San Joaquin Valley but increased along the central coast.

PASTURES AND LIVESTOCK: Ranges were in poor condition from southern California to west Texas. Pastures were rated fair to mostly good elsewhere in the Nation, but cool temperatures slowed grass growth across the North. Texas producers continued heavy marketing of livestock because of the continuing dry conditions. Producers continued assessing livestock losses from last week's blizzard in the northern Plains and Rocky Mountains; sheep losses appear high in some areas.

State Summaries of Weather and Agriculture

These summaries provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by SRS State Statistical Offices in cooperation with the National Weather Service.

ALABAMA: Air temperatures slightly below normal in north to 3 to 5° above in south. Rain less than 1.00 in. extreme south, 2.00 to 4.00 in. elsewhere.

Soil moistue adequate to surpplies. Fieldwork: 2.2 days. Corn planted 80%, 75% 1983, 78% average. Cotton planted 40%, 53% 1983, 64% average. Soybeans planted 3%, 5% 1983, 5% average. Peanuts planted 50%, 52% 1983, 47% average. Sorghum planted 26%, 15% 1983, 16% average. Wheat headed 78%, 53% 1983, 84% average. Wheat turning color 12%, 7% 1983, 14% average. Hay harvested 10%. Activities: Routine care of livestock and poultry; spraying fruit trees; planting corn, cotton, soybeans, peanuts, and sorghum; spreading fertilizer and seed bed preparation. Conditions: Livestock, wheat, pastures, and corn mostly good. Pasture feed mostly adequate, stored feed mostly short.

ALASKA: Weather conditions in the railbelt ranged from cool and cloudy with intermittent showers and sunshine to warm, sunny days with freezing temperatures at night.

Many areas were still too wet to get machinery into fields. Fertilizing was general on areas with lighter soils. Small grain seeding began in the Delta area last week and should become general by mid-May. Commercial vegetable growers started early planting of hardy vegetables prior to mid-April and continue their weekly planting. Potato planting scheduled to be well underway by mid-May. Soil moisture supplies were adequate or better in all areas. Livestock came through winter in fair to excellent condition. Hay supplies ranged from short in some areas of the Tanana Valley to mostly adequate to surplus elsewhere in the State. Fertilizer supplies were mostly adequate.

ARIZONA: Sunny skies, warming trend dominated weather. No precipitation reported. Windy conditions several days. Average temperatures close to seasonal normals, 4 below normal to 3° above.

Cotton 96% seeded 94% last year, 92% average. Seeding progress ranged 89% southeast, 98% Central Valley, 99% west. Plant development ranged from plants emerging in southeast to plants developing pinhead squares in west. Cool temperatures slowed plant emeragence. Practically all stands established Yuma, La Paz Counties. Wheat, barley good progress, crop development ranged 95% headed Graham County, 69% torning color Yuma County. Harvest 5% complete Yuma County. Barley harvest underway Maricopa County, 5% harvested. Alfalfa harvest active in the Central Valley, second cutting in progress or completed. Growers in Yuma, La Paz Counties preparing for or harvesting third cutting. Harvest got underway southeast. Sorghum planting active Yuma County, some stands established. Seedbed preparation continued other areas. Safflower good progress, plants near flowering stage of development. Spring lettuce harvest active Salt River Valley, Marana, volumes heavy. Demand increased, growers prices higher than previous week. Cool weather slowed lettuce development Wilcox area, extended expected beginning harvest to May 20. Moderate volumes cabbage, greens, carrots, broccoli harvested Salt River Valley. Heavy volumes green onions, some dry onions moving. Chipper, table potato harvests increased Central Valley. Cabbage, lettuce harvested Harquahala Valley. Grapefruit, Vallencia picking continued, 50% grapefruit, 75% vallencia crops harvested. Some peaches harvested Salt River Valley, apricot picking expected to start by May 11.

ARKANSAS: Temperatures averaged cooler than normal for north and central portions to near normal in the south. High 90°, low 32°. Most rainfall 8.52 in., least 0.99 in. Excessive rainfall in central and east central portions.

Days sutable for fieldwork: 3.3. Soil moisturedequate northwest, surplue elsewhere. Crop growth moderate. Farm progress one to two weeks behind schedule. Rice condition fair; planted 38%, 28% 1983, 48% average; emerged 10%, 7% 1983, 25% average. Cotton fair condition, planted 10%, 33% 1983, 44% average; emeraged 2%, 8% 1983, 25% average. Soybeans planted less than 5%, 6% average. Winter wheat good condition, but some lodging from heavy rains. Three-fourths headed. Oats fair condition. Corn planted 76%, average 69%, fair to good condition. Sorghum fair condition, 34% planted, 43% average. Pastures providing ample forages. Cattle gaining on improved pastures.

CALIFORNIA: Some precipitation during the first half of the week and mostly over the extreme north end of the State. The rain there, however, fell nearly every day during the week. With the rain and cooler air from the ocean, temperatures were generally cooler than normal although the central and south coasts had weekly mean temperatures that were a few degrees warmer than normal. The air was cool enough to produce 30's in the Central Valley and freezing temperatures along the north and central coasts.

Cotton planting 100%, 90% last year, 96% average. Some acreage replanted due to cool weather and winds. Rice seeding 15% complete, 40% last year, 42% average. Cool weather still slowing rice planting. Winter wheat 90% headed, 75% last year, 88% average. Corn, barley, sugarbeet plantings continue. Sugarbeet, grain hay, alfalfa harvestes in progress. Normal cultureal practices ongoing. growers applying materials for pest, disease control, irrigating orchards, vineyards. Avocados blooming. Burlat cherries being harvested, set for bings excellent. Last week scattered grape vineyards reported frost damage in Fresno-Tulare area. Growers continue sucker vines, thin bunches, apply gibberellic acid. Table grape harvest get underway in Coachella Valley next week. Olive bloom continues. Stone fruit maturity slowed by recent cool weather, still generally ahead of normal. Thinning continues plums, nectarines, peaches. Desert peach harvest slowing to completion. Some plum fruit losses reported, due to wind. Pomegranates in full bloom. Lemon harvest, Central Valley about 85% complete; only 75% complete southern coast. Navel orange harvest essentially complete, Vallencia orange harvest gradually increasing, domestic, export markets. Quality very good. Some locations wind damage ocurred almonds. Pecans, pistachios, walnuts make good progress. High winds caused some damage to melon and tomato crops Desert and San Joaquin Valley. Artichoke, asparagus harvests full swing. Harvest broccoli, cauliflower active Central Coast. Some replanting cantaloupidue high desert winds. Few fields showing mosaic problems. Carrot harvest active Desert, San Joaquin Valley. Celery harvest moderate South Coast. Sweet corn harvest underway Coachella Valley. Lettuce harvest nearing end San Joaquin Valley, increasing Central Coast. Grading dry onions increased Desert. Harvest red onions started Fresno. Harvest spring potatoes increased Kern District. Planting summer potatoes continued. Planting fall potatoes started. Strawberry harvest heavy. Planting sweetpotatoes continued. Harvest Desert maket tomatoes expected this week. Some wind damage processing tomatoes Desert. Foothill range, pastures dry, result continued winds. Fire danger increased few fires reported southern districts. Cattle, sheep being moved summer pasture.

COLORADO: System on 1st brought 0.20 to 0.40 in. precipitation. Another front on 6th left 0.25 to 0.50 in. of precipitation in most areas with the west central receiving more. Temperature 4 to 7° below normal.

Winter wheat in good condition, 8% pastured; 9% jointed, 39% last year, 38% average. Barley fair to good 74% seeded, 81% last year, 80% average; emergence 31% 42% last year, 51% average. Corn planted 9%, 12% last year, 30% average. Emergence very limited. No sorghum planted. Sugarbeets 66% planted, 57% last year, 79% average. Two days for fieldwork. Livestock under stress.

FLORIDA: Hot, sunny days and clear, warmer nights continued through weekend. Rain limited to some isolated late afternoon, evening thunderstorms. A narrow band of high thunderstorms with scattered hail in north central peninsula on the 5th brought rains of 0.50 to 1.00 in., a few spots had up to 7.00 in. Hail up to an inch in diameter with widely scattered thunderstorms mainly in the interior west central area late afternoon, evening of the 6th. Highs averaged in the 90's with low's in the 70's.

Soil moisture mostly short; a few areas in north and extreme south adequate. Weekend rains, mostly in north central peninsula were beneficial. Early corn good growth. Tobacco growing well. Soybeans, sorghum, peanuts and cotton being planted. Haymaking underway. Sugarcane good growth. Small grains ripening. Pasture condition varies, fair to good. Some central, northern localities in need of rain. Pastures in the south continue to make excellent growth. Cattle continue to show improvement and remain inmostly good condition statewide. Citrus groves need rain, most irrigation being used. Valencia harvest increasing with good maturity tests. Grapefruit movement slowing as supplies diminish. Caretakers active pruning and spraying. Hot days and warm nights prevailed in vegetable areas. Rainfall first five days limited to few scattered showers some ares. Heavy thunderstorms occurred north central areas 5th, 6th. Generally, weekend rains relieved dry conditions northern third of peninsula. Overall vegetable shipments gained 29% from the previous week. Crops leading the increase were carrots, celery, sweet corn, cucumbers, eggplant, escarole, potatoes, radishes, tomatoes, watermelons. Crops continuing with steady supplies were snap beans, cabbage, strawberries. Crops declining in volume were cauliflower, Chinese cabbage, lettuce, squash. Potato digging near peak level Hastings area. Watermelon cutting becoming active Immokales area.

GEORGIA: Average temperatures in the 60's north. Low to mid 70's south. Temperatures averaged 2 to 5° above normal most locations. Clouds held temperatures to slightly below normal levels in the mountaine. Rainfall totals were in the 1.00 to 2.00 in. range with isolated amounts of 3.00 to 4.00 in. In the northwast. Extreme southern areas received under 0.50 in. Heaviest 24-hour amount was 3.18 in. at Claxton. Rain fell on 3 to 5 days in the north, 3 days central, and 1 to 2 days in the south.

Soil moisture 61% surplus. 31% adequate, 8% short.Average days suitable for fieldwork: 2.5. Rains and wet soils still delaying fieldwork. Several counties suffered damage from tornadic winds and very heavy rainfall. Corn 93% planted, 92% last year, 95% average; condition 4% excellent, 52% good, 39% fair, 5% poor. Cotton 38% planted, 49% last year, 71% average; condition 6% excellent, 35% good, 55% fair. Grain sorghum 19% planted, 17% last year, 25% average, condition 52% good, 45% fair. Peanuts 48% planted, 57% last year, 67% average; condition 56% good, 38% fair. Tobacco transplanted 98%, 100% last year, 99% average; condition 53% good, 47% fair. Watermelons 93% planted this year, last year and average, condition 51% good, 41% fair, 6% poor. Wheat jointing 99% this year and last year; boot 96% this year, 97% last year; headed 88% this year, 85% average; condition 7% excellent, 56% good, 35% fair. Rye condition 6% excellent, 61% good, 26% fair. Other shall grains 6% excellent, 99% good, 33% fair. Apples 100% bloomed, 93% last year; condition 19% excellent, 58% good, 23% fair. Peach harvest began few southermost counties: Condition 27% excellent, 55% good, 18% fair. Pastures 14% excellent, 67% good, 19% fair. Cattle 67 excellent, 71% good, 22% fair. Hogs 6% excellent, 73% good, 18% fair.

HAWAII: Island weather was favorable for crop growth. Except for a few areas, sunny conditions prevailed after a few evening and morning showers. Temperatures averaged above normal and winds were light.

Insect and disease problems increasing due to the excellent weather. Spraying heavy to combat these problems. Irrigation heavy in areas that received only light rainfall. Supplies of Chinese cabbage, head cabbage, and head lettuce are heavy and of good quality. Papaya production has past peak harvest, but remains relatively heavy. Banana output on a seasonal decline. Watermelon production picking up, and plantings continuing.

IDAHO: A low pressure system, centered over the State, brought cool northerly air into the State. Rain, snow and high winds accompanied the cool weather pattern. Temperatures averaged well below normal with many locations reporting 8 to 10° below normal. The warmest spot was Moscow at 1° below normal. Ashton was the coldest at 16°. Most areas of the State received above normal precipitation. Moscow and Lewiston were the driest, with slightly below normal precipitation. Ashton was the wettest with 1.49 in. of rain.

Plantings progressed as 3.0 days were suitable for fieldwork. Spring wheat reached 67% seeded versus 77% in 1983 and 78% average. Emergence was at 32% compared to 34% last year and 44% average. Barley seeded reached 46% versus 54% in 1983 and 65% average. Sugarbeets advanced to 85% planted compared to 96% last year and the 92% average. Onions were 99% planted with 41% emerged. Potato planting reached 25% compared to 32% last year and 35% average. Winter wheat was 81% not yet jointed and 19% in the joint stage. Cattle and sheep have been moved on to summer pasture and range.

ILLINOIS: Temperatures 2 to 6° below normal. Precipitation 0.09 to 1.53 in.

Soil moisture 30% adequate, 70% surplus. Days suitable for fieldwork: 2.00 Wheat condition 4% excellent, 52% good, 36% fair, 8% poor. Winter wheat 0% headed, last year 2%, average 10%. Oats seeded 75%, last year 79%, average 90%. Tillage for corn and soybeans 82% complete, last year 84%, average 91%. Corn planted 7%, last year 18%, average 39%. Alfalfa condition 15% excellent, 66% good, 18% fair, 1% poor. Pasture condition 7% excellent, 69% good, 24% fair; supplying 58% livestock roughage requirements, last year 66%, average 71%.

INDIANA: High temperatures in low to mid 60's over most of State, 3 to 8° below normal. Lows generally 2 or 3° below normal averaging in 40's most areas. Soil temperatures in the 50's. Rainfall heaviest in south with totals from 0.20 in. in northeast to 1.60 in. in southwest.

Fieldwork averaged 2.5 days. Topsoil and subsoil moisture adequate to surplue. Spring cropland 70% tilled, 1983 80%, average, 80%.

Corn 5% planted, 1983 10%, average 30%. Soybeans 1% planted, 1983 0%, average 3%. Oats 60% seeded, 1983 80%, average 80%. Wheat condition mostly fair to good. Wheat 30% jointed, 1983 55%, average 20%. Wheat 0% headed, 1983 0%, average 5%. Wheat 8 in. tall, 1983 13 in, average 10 in. Pastures mostly fair to good.

IOWA: Standing water, some foolding, high stream floodingflows, 4 in. soil temperatures, lower 50's.

Less than 1.0 day suitable for fieldwork. Topsoil moisture conditions 89% surplus, 11% adequate; subsoil moisture conditions 66% surplus; 31% adequate; 3% short. Fertilizer applications 64% complete. Conventional tillage operations 68% complete, same as last year; 87% normal. Conservation tillage operations 60% complete. Winter wheat 4% excellent; 41% good; 44% fair; 11% poor 10 very poor. Pasture conditions 1% excellent; 39% good; 48% fair; 12% poor. Corn 6% planted; 23% last year; 36% normal. Corn planting limited central and east central districts. Intended oat sown 77%; 78% last year 90% normal. 23% emerged; 16% last year; 55% normal. Soybean 0% planted; last year 1%; normal 2%. Livestock mostly good to fair condition. Pasture growth slow.

KANSAS: Precipitation averaged 1.50 to over 2.00 in. west and north central and 0.75 to 1.50 in. east and south central. Temperatures averaged 52° northwest and 56 to 58° east and south. These were from 3 to 6° below normal east and north central and 2 to 4° below normal west and south central.

Wheat condition fair to good except poor northwest and parts north central and west central. Wheat development slow, 1% wheat acreage headed, 1% last year, 15% average. Disease infestation still a problem in central and eastern thirds of State. Few reports of insect problems. Surface and subsoil moisture mostly adequate west and central, surplus east. Nearly 10% corn planted, 15% last year, 35% average. No sorghum planted, 0% last year, 2% average. No soybeans planted, none last year, 1% average. Range and pastures good to excellent. Days suitable for fieldwork: 5.0.

KENTUCKY: Temperatures generally cool, 2 to 5° below normal. Rainfall above normal, 1.50 to 5.00 in. received. First half of week dry with most rain occurring over weekend.

Fieldwork halted again and further delayed due to rains. Soil moisture 64% surplus, 36% adequate. Most farmers 2 weeks behind schedule. Tobacco plants fair, growth slow. Corn planting 15% complete, 6% year ago, 39% average. ABout 12% of planted corn emerged. Some germination problems. Soybeans less than 1% planted, none last year, average 4%. Wheat fair to good. growth slowed due to cool temperatures, 4% headed. Pastures fair to mostly good

LOUISIANA: Rainfall totals none to 2.61 in. Temperatures ranged from 2 to 3° below normal north to 3 to 4° above normal south. High 96°, low 48°.

Soil moisture short. Days suitable for fieldwork 5.4. Activities included spring plowing; planting rice, corn, cotton, and sorghum; and application of herbicides, fertilizers and insecticides. Spring plowing 87% 1984, 83% 1983, 83% average. Rice planting 76% 1984, 68% 1983, 78% average. Rice emerged 64% 1984, 54% 1983, 69% average. Rice condition fair to good. Corn planting 92% 1984, 83% 1983, 87% average. Corn emerged 86% 1984, 75% 1983, 80% average. Corn condition fair to good. Cotton planting 32% 1984, 45% 1983, 42% average. Cotton emerged 13% 1984, 13% 1983, 22% average; condition fair to good. Soybean planting 4% 1984, 3% 1983, 4% average. Sorghum planting 69% 1984, 52% 1983. Sorghum emerged 48% 1984, 24% 1983. Sorghum condition fair to good. Sweetpotato planting 10% 1984, 15% 1983, 27% average; condition fair to good. Sugarcane condition poor to fair. Winter wheat condition good. Winter wheat headed 93% 1984, 88% 1983, 93% average. Wheat turning color 26% 1984, 36% 1983. Vegetable condition fair to good. Strawberry harvest continues. Pasture and livestock condition fair to good.

MARYLAND AND DELAWARE: Maryland: Rain early in the week limited fieldwork to under 4.0 days. Acreage plowed at 65%, last year 55%. Small grains in fair to good conditions. Oats 70% planted; 60% last year. Barley headed 60%, last year 5%. Rye 50% headed 90% in 1983. Corn planting 15%; last year 25%; average 35%. Soybean planting to begin yet. Potato planting 95% normal 100%. Snapbeans 55% planted, 60% last year. Lima beans 25% planted, 30% 1983. Sweet corn 35% planted, 100% planted 1983. Tomatoes 15% planted; equal to 1983 pace. Cucumbers and watermelon 30% planted equal to 1983. Topsoil and subsoil mostly surplus.

Delaware: Rains early in the week delayed fieldwork but farmers did manage to work 4.3 days in their fields. Plowing reached 75%, 35 points above last week, ten points above 1983. Small grain in good condition. Barley headed; 75% last year. Corn planting 20% complete; 45% last year and average. Soybean planting has started in southern area of the State. Potatoes 90% planted; last year 80%. Snapbeans 20% planted; 10% last year. Sweet corn 20% planted; 40% last year. Cucumbers 20% planted, 40% 1983. Topsoil and subsoil moisture adequate.

MICHIGAN: A very cool spring week across the State with temperatures averaging 10 below normal. Precipitation was heaviest in northern areas.

Cool temperatures and wet soils have kept fieldwork ata slower than normal pace. Progress picked up during the week as 4.0 days were suitable for fieldwork. Soil moisture supplies rated as adequate to surplus. Spring plowing progressed to 55% complete, 50% last year and 61% average. Corn planting 10% complete this year, 5% in 1983, 15% average. Oats 60% planted, 50% last year, 63% average. Soybean planting has not started, same as last year and normal. Sugarbeet planting 90% complete 55% last year, 64% average. Fruits and vegetables progressing near normal.

MINNESOTA: The week began with snow and ended with rain for the southern portions. Temperatures averaged 4 to 7° below normal. High: 69°, low: 22°. Precipitation averaged 0.33 to 0.37 in. below normal for northwest and northeast and normal to 0.75 in. above normal elsewhere. Greatest reported weekly total; 2.14 in.

Excess moisture kept farmers out of the fields in southern portions, but field activity continued in the north. Corn planting fell behind normal progress but small grain planting kept pace with normal. Soil temperatures were still low, slowing germination. Number of days suitable for fieldwork; 1.8. Topsoil moisture: 2% short, 46% adequate, 52% surplus. Planted: Field corn 8%, 1983 12%, normal 26%; spring wheat 59%, 1983 55%, normal 60%; oats 67%, 1983 53%, normal 63%; barley 51%, 1983 50%, normal 52%. Emerged: Spring wheat 9%, 1983 10%, normal 27%; oats 14%, 1983 8%, normal 27%; barley 5%, 1983 6%, normal 20%.

MISSISSIPPI: Temperatures below normal north, near normal central, above normal southern area of State. Extremes 38 and 96°. Rainfall above normal except for southern area. Greatest 24-hour rainfall 4.11 in. Greatest weekly rainfall 7.00 in

Soil moisture adequate southern half of State, excessive northern half. Fieldwork: 2.1

days suitable, 4.6 1983, 4.7 average. Cotton fair; 16% planted, 45% 1983, 48% average; 5% emerged, 5% 1983, 21% average. Soybeans 2% planted, 1% 1983, 4% average. Rice fair; 36% planted, 44% 1983, 59% average; 20% emerged, 10% 1983, 28% average. Wheat good; 91% heading, 73% 1983; 1% ripe, 1% 1983. Corn fair; 72% planted, 52% 1983, 79% average; 47% emerged, 30% 1983. Sweet potatoes 17% planted; watermelons 48%; peanuts 14%. Sorghum acreage 25% seeded, 12% 1983, 16% average. Pasture condition and peach condition both good to fair.

MISSOURI: Temperatures averaged from 2 to 8° below normal as a series of fronts passed through the area. Precipitation was widespread and generally less than 1.00 in. but some spots received 3.00 in.

Only 1.5 days suitable for fieldwork. Oats seedings 60% complete, 87% last year, 100% normal. Corn 12% planted, 18% last year, 39% normal. Cotton 7% planted, 13% last year, 37% normal. Sorghum 4% planted, 2% last year, 13% normal. Winter Wheat 2% headed, 4% last year, 19% normal. Soybeans planting not started, 0% last year, 8% normal. Winter wheat remains in mostly fair condition. Pastures continue to improve. Fair to good conditions. Topsoil moisture 33% surplus and 67% adequate.

MONTANA: Cool week, temperatures averaged 4 to 11° below normal. South Central, northeast and southeast showed largest departures from normal, southwest smallest departures. Minimum temperatures very cold first of week, some were records for the day.

Precipitation confined mostly to west, southwest andsouth central areas from 0.25 in to over 1.00 in. common, North central and northeast remained mostly dry.

Soil moisture continues short in northwest and northcentral, mostly adequate elsewhere. Fieldwork: 4.0 day suitable. Winter wheat in fair condition in northeast, good elsewhere, winterkill mostly light. Planting completed: Spring wheat 75%, barley 60%, Oats 50%, sugarbeets 35%, corn 15%. Potato and dry bean plantings just beginning, Cool weather caused some frost damage to winter wheat and slowed plant growth. Spring wheat planted 75 1983, 75 1983, 60 average; emeraged 25 1984, 20 1983, 20 average. Winter wheat headed 0 1984, 0 1983, 0 average.

Calving 95%, lambing 90%, and shearing 85% complete.About 15% of cattle and 10% of sheep moved to summer ranges. Losses from late April snowstorm heaviest in southeastern part of State. Scouring and other sickness reported due to wet, cold weather. Losses, mostly lambs and calves, still being assessed.

NEBRASKA: Rain reported every day. Precipitation 0.50 in. Panhandle, 1.00 to 3.00 in. remainder of State. Temperatures 4 to 9° below normal.

Winter wheat mostly fair. wheat jointing 8%, 10% last year, 25% average. Corn planting 2%, 10% last year, 25% average. Oat seeding 70%, 80% last year, 93% average. Alfalfa mostly fair to good. Days suitable for fieldwork: 1.0.

NEVADA: Several high pressure fronts moved across northern areas both early and late in period but a moist flow of air ahead of these systems continued to drop significant amounts precipitation. Central and southern areas were mostly dry. Warm daytime temperatures and continous rain combined to produce flooding in river areas north. Temperatures in north near normal while central and south slightly above. Extreme 92 and 15°.

Small grain seeding progress ahead of last year but about normal condition of alfalfa hay, winter wheat and emerged spring grains mostly good. Calving, lambing, and shearing slightly ahead of year ago. Potato planting gaining momentum.

NEW ENGLAND: Average temperatures ran 2 to 4° below normal over Vermont, New Hampshire, and Maine, near or slightly above normal elsewhere. The night of 2nd gave many low readings in mid and upper 20's. Highest was 84° on 30th at Boston, Massachusetts. Some showers lingered 30th but the bulk of the week's precipitation came 3rd to 5th. All stations received at least 0.25 in., most got 1.00 in. or more. Largest measurement was 1.77 in. at Worcester, Massachusetts.

Field preparation activity in full swing. Growersplowing, fertilizing, spreading manure, and planting on well-drained soils. Soil moisture adequate. Grazing availablility adequate to short. There were 5.5 days suitable for fieldwork. Rhode Island potatoes 55% planted, none emerged. Field activity at standstill in northern Maine until ground thaws. Field corn less than 5% planted in most areas. Sweet corn 5 to 10% planted. Connecticut sweet corn planting advanced to 30%, 20% emerged.

NEW JERSEY: Temperatures averaged 1° below normal. Extremes were 31° on the 3rd and 78° on the 1st. Weekly rainfall averaged 1.99 in. north, 1.00 in. central and 0.71 in. south. The heaviest 24-hour total 2.24 in. on the 3rd to 4th. Estimated soil moisture, in percent of field capacity, averaged 94% north, 89% central and 90% south. Four inch soil temperatures averaged 53° north, 57° central and 58° south. Fieldwork: 5.5 days suitable. Fieldwork active underimproved soil conditions. Asparagus, spinach and greesn being harvested. Vegetable planting active. Potato planting active when conditions permit. Peach bloom past peak. Apple bloom reaching peak. Strawberries and blueberries coming in bloom. Barley and rye headed out. Field corn and oat planting active as soil conditions improve. Soil preparation for soybeans continues. Pasture and hay growth good.

NEW MEXICO:: Warmer weather and continued wind further lowered the soil moisture. Alfalfa harvest began while cotton and corn planting progressed. Lettuce harvest near. Onions in good condition. Irrigated small grains in good condition while dryland crops in poor to fair condition. Frost hit apple crop in one area, severe losses expected. Cattle moving to summer pastures. Still supplementing in the lowlands. Southeastern part of the State in drought. Sheep and lamb shearing complete.

NEW YORK: Temperatures near normal, rainfall mostly above normal

Many fields wet, fieldwork progressing slowly. Oat planting 13% complete, 7% 1983, 41% average. Corn planting under 5% done. same 1983, and average. Wheat, pastures in good condition. Vegetable planting underway. Onions in Wayne, Oswego counties mostly planted. Western apples in pre-pink stage. Hudson Valley apples in tight cluster stage. Lake Champlain apples in silver tip to half inch green stage.

NORTH CAROLINA: Temperatures ranged near normal. Precipitation between 0.10 and 4.00 in.

Soil mositure: 1% short, 61% adequate, 38% surplus. Days suitable for fieldwork: 3.9. Condition: Wheat 14% fair, 81% good, 5% excellent. Oats 4% poor, 20% fair, 74% good,

2% excellent. Tobacco beds 2% poor, 23% fair, 68% good, 7% excellent. Irish potatoes 6% poor, 12% fair, 75% good, 6% excellent. Peaches 7% fair, 87% good, 6% excellent. Plantings: Corn 72%, 1983 57%, average 76%.

NORTH CAROLINA: Temperatures ranged near normal. Precipitation between 0.10 and 4.00 in.

Soil mositure: 1% short, 61% adequate, 38% surplus.

Days suitable for fieldwork: 3.9. Condition: Wheat 14% fair, 81% good, 5% excellent. Oats 4% poor, 20% fair, 74% good, 2% excellent. Tobacco beds 2% poor, 23% fair, 68% good, 7% excellent. Irish potatoes 6% poor, 12% fair, 75% good, 6% excellent. Peaches 7% fair, 87% good, 6% excellent. Plantings: Corn 72%, 1983 57%, average 76%. Flue cured tobacco 54%, 1983 23%, average 49%. Cotton 27%, 1983 45%, average 61%. Peanuts 13%, 1983 16%, average 29%. Sorghum 11%, 1983 2%, average 16%. Soybeans 2%, 1983 2%, average 9%. Major farm activities: Planting corn, cotton, peanuts and sorghum, transplanting tobacco, preparing land, haying, applying chemicals.

NORTH DAKOTA: It was a cold week. Average temperatures ranged from 7° below normal east central to 12° below normal north central. Extremes were 12° west central April 30 to 67° south central May 5. Precipitation generally very light north and west, near normal southeast.

Wet conditions holding up spring work which lags normal. Topsoil moisture 98% adequate or surplus. Hard red spring wheat planting 23% complete compared to 35% last year and average of 41%. Other crop and comparisons to last year and average; Durum 13, 20, 29: Oats 15, 31, 37: and barley 27, 26, 37. Sugarbeets 48% planted, average 65. Planting of corn was 2% complete and potatoes 11%. Seed emergence slow due to cool and moist ground. Livestock losses heavy due to storm April 26 to 27, scours and pneumonia may add to total.

OHIO: Temperatures 2 to 5° below normal. Extremes from 28 to 77°. Precipitation variable, most after May 3. Totals from 0.10 to 1.81 in.

Soil temperatures low to mid-50's. Soil moisture 0% short, 25% adequate, 75% surplus; 3.0 days suitable for fieldwork. Activities included planting corn and soybeans on a limited basis, applying fertilizer, plowing and hauling manure. Corn planted 6% 1984, 15% 1983, 25% average. Soybeans planted 1% 1984, 0% 1983, 5% average. Winter wheat headed 0% 1984, 0% 1983, 0% average; jointed 10% 1984, 30% 1983; condition fair. Pasture condition fair to good.

OKLAHOMA: Temperatures averaged 7° below normal panhandle to 3° below normal northeast, east central, and southeast.

Light scattered showers improved wheat prospects but sunshine and warmer temperatures needed. Moisture stressed southwest fields need rain badly and producers now enrolling in PIK acreage reduction program. Wheat made rapid growth but lags a week behind average. Mustard and other weeds infest north and northwest fields. Soil borne mosaic extremely damaging north central localities. A few cotton growers began planting although most await rain and warmer temperatures. Wheat good, pastures and livestock good to fair condition. Wheat heading: 20%; 25%, 1983: 50%, average. Sorghum planted: 3%; 10%, 1983: 5%, average. Cotton planted; 1%; 10%, 1983: 3%, average.

OREGON: Heavy precipitation west of the mountains ranged from 3.00 in. at the coast to 2.00 in. in western valley. Eastern areas received lighter amounts of 0.20 to 1.00 in. precipitation. Temperatures warmed slightly in all areas, but still were up to 9° below normal.

Winter wheat in good condition; isolated reports of rust, septoria, foot rot and yellow dwarf. Broadleaf weed control in central areas. Spring seeding of grains near complete at lower elevation. At higher elevation wet fields slowing work. Summer fallow work continues in east. Malheur County Sugarbeet crop nearly all emerged. Irrigation of grass seed in central areas. Soil moisture supplies adequate to surplus. Hood River apple orchards being sprayed for thinning and scab control. Wasco County cherries past bloom. Union County cherries starting bloom; some frost damage. Williamette Valley cherries beginning fruit set. Filberts showing serious leafroller problem. Strawberries blooming and setting fruit; prospects remain below average. Tree fruits in west not frost hurt;; some fungicide spraying; more than usual brown rot. In southwest pears have good fruit set; scab spraying. Cranberries in fair condition due to cool spring. Potato planting to start next week in central areas; underway in Klamath County. Also in Malheur, onions all seeded, 3/4 emerged, good crop expected; sweet corn planting underway. Onions going in at north end of Willamette Valley. Some sweet corn and snap beans planted in driest fields. Onions emerging in Jackson County. Range and pasture condition fair to good. Livestock condition good. Pasturing of animals slower than normal due to wet conditions of rangeland.

PENNSYLVANIA: The week was cloudy but temperatures were only slightly below normal. The weekly mean of 53° was 1° below normal. Frost was observed in the mountain valleys on 2nd and 3rd. Extremes were 82 and 29°. Precipitation average 1.10 in., 0.28 in. above normal. Most of the rain fell on 4th in showers and thunderstorms.

Days suitable: 3.0. Moisture surplus to adequate. Activities: Spreading lime, fertilizer and manure; spraying; harvesting rye for green chop and silage; cutting asparagus; plowing; and planting oats, corn, alfalfa and potatoes. Plowing 40% complete, last year 45%, average 64%. Oats 52% planted, last year 50%. Potatoes 19% planted, last year 27%. Corn 8% planted, last year 7% average. 16%. Barley 13% in boot, last year 8%. Hay stand conditions good to fair. Feed from pastures mostly average. Peaches 32% pink and 33% in full bloom or past, last year 25% pink and 58% in full bloom. Cherries 42% pink and 29% in full bloom or past, last year 24% and 55%. Apples 24% pink and 9% in full bloom or past, last year 32% and 24%.

PUERTO RICO: Island average rainfall 0.47 in. or 0.89 in. below normal. Highest weekly total 2.28 in. Highest 24-hour total 2.00 in. Temperature averaged about 79 to 77° on coasts and 72 to 71° interior divisions. Mean station temperature ranged from 82.2 to 64.3°. Extremes 95 and 51°.

SOUTH CAROLINA: Humid unstable weather through mid-week. Showers and thunderstorms again over weekend. Localized wind and hail damage reported. All areas received above normal rainfall with heaviest downpours in northwest.

Soil moisture mostly surplus. Days suitable for fieldwork: 2.80 corn condition fair to good; 88% planted, 91% last year, 94% average. Cotton planting 58%, 78% last year, 84% average. Tobacco growers transplanted 95%, 87% last year, condition good. Wheat condition fair to mostly good, 85% headed, 76% last year. Peach condition mostly good, although some severe hail damage reported primarily in the ridge counties. Tomato condition good.

SOUTH DAKOTA: Average temperatures were 6 to 11° below normal. Extremes: 68 and 16°.. Precipitation was widespread.

Topsoil moisture remained surplus in the southeast and south central and adequate over remainder of the State.

Winter wheat in fair to good condition. Range and pasture conditions fair to good. Feed and stock water supplies adequate. Calving 80% complete, lambing 82%. Thirty-one percent of cattle moved to pasture. Corn planted 1%, 1983 1%, average 9%. Spring wheat planted 48% 1983 74% average 76%. Spring wheat emerged 7% 1983 18%, average 46%. Sorghum planted 0%, 1983 0%, average 1%. Winter wheat headed 0%, 1983 0%, average 0%.

TENNESSEE: An east to west oriented stationary front lying mainly south of the State was primarily responsible for widespread, heavy rainfall during the week. Severe thunderstorms and high winds brought hail and high winds to many areas. Precipitation was widespread with accumulations of over 6.00 in. reported in many areas. Temperatures averaged about 2° below normal in the west, 5° below in the middle of the State, and 6° below normal in the east.

Farmers averaged less than 1.0 day of fieldwork. Soil moisture: 92% surplus, 8% adequate. Cotton planted: 5%, 1983 7%, average 39%. Corn planted 23%, 1983 23%, average 51%. Soybeans planted 1%, 1983 1%, average 4%. Tobacco beds with plants up 88%. Wheat headed 19%, 1983 14%, average 57%. Alfalfa hay, percentage of first cutting completed 4%. Pastures and livestock rated in good condition. Fruit trees reported in mostly fair to good condition.

TEXAS: Wet week portions North Texas several thunderstorms over area. Early week rainfall over parts north central and northeast Texas while remainder Texas enjoyed fair skies, warm temperatures. High pressure mostly clear skies dominated State. On 5th, thunderstorms developed Panhandle, Central Texas, along Red River. Temperatures near normal Plains, Trans-Pecos while reminder above normal. Several afternoon temperatures 100's. Rainfall above normal north central, East Texas while near normal or below normal elsewhere. Showers scattered areas minor relief drought like conditions; however, State remains critically dry. Dryland corn, grain sorghum, cotton continue stress hot, dry weather. Irrigated crops good present, availability water problem some areas. Heavy culling livestock. Grain sorghum signs stress lack moisture many areas. Planting slow southern High Plains dry conditions. Some rain early week northern High Plains, plantig begin soil dries. Most fields planted Low Plains. Central, South Texas fields beginning wilt dry conditions. Spraying greenbugs continues. Coastal Bend, Valley fields beginning head. Lack moisture lower yield prospects. Irrigated sorhgum looks good. Corn planted Plains. Emergence slow due recent cool temperatures. Some lodging Central Texas fields. Irrigated corn Rio Grande Valley looks good. Corn tasseling valley, up Coastal Bend. Statewide condition 58%, compared with 72% a year ago. Cotton planting High Plains irrigated land. Dryland farmers awaiting adequate soil moisture. Spraying active Cross Timbers. Cotton completed Blacklands. Cotton Coastal Bend need moisture. Slow growth reported. Squaring continues Coastal Bend southward. Scattered showers northern High Plains helped Wheat. Growing conditions better. Irrigated wheat looks good, continues to head. Wheat turning color Cross Timbers; however, need rain improve yields. Harvest into Central Texas low yields reported. Mildew, rust Central Texas Fields. Significant amount wheat statewide baled, not harvested due low yields. Statewide wheat condition 64% of normal, compared to 81% a year ago. Rice virtually all emerged. Crop late due slow growth early cool temperatures. Some replanting sugarbeets due wind damage. Cotton planted 17 1984, 14 1983, 21 average; Squaring 4 1984, 0 1983, 1 average. Rice planted 100 1984, 89 1983, 93 average; emerged 76 1984, 62 1983, 71 average. Sorghum planted all purposes 64 1984, 67 1983, 66 average; headed 0 1874, 1 1983, 1 average. Wheat headed 42 1984, 44 1983, 51 average; turning color 9 1984, 5 1983, 4 average. Planted Corn for all purposes 92 1984, 86 1983, 81 average. Peanuts planted 9 1984, 13 1983, 12 average. Sugarbeets planted 100 1984, 96 1983, 98 average.

Commercial Vegetables: Rio Grande Valley, spring vegetables fair condition. Spring onion harvest gained momentum, winding down soon. Good yields reported. Cabbage harvest winding down, good yields reported. Carrot harvest over. Water shortage problem soon, heavy watering this spring. Watermelons, cantaloupes good crop set. Hedging citrus groves continues. Some trees putting out new growth. Most hedged groves coming back. San Antonio-Winter Garden, carrot, onion harvest begun small scale. Cucumbers showing signs drought. East Texas, vegetables heavy watering. Tomato plants some wind damage. High Plains, onions signs wind damage. Potatoes coming up. Carrot planting begun. Peach trees good crop set, minimal droppage. Pecan trees signs drought. Some blooms dropped winds and dry weather. Spraying casebearers. Moisture needed.

Range and Livestock: Range conditions declined providing little no grazing. Supplemental feeding picked up. Planted hay fields slow growth. Stock tanks drying up daily. Livestock conditions fair, culling herds. Spring shearing winding down.

UTAH: Precipitation moderate to heavy north central and northern mountain division, light to moderate rest of State. Increasing temperatures throughout week. Minimums averaged 5° below normal (except normal in Dixie Division), ranging 11° below to 1° above. Maximums averaged 12° below normal north half of State and 7° below south half (except Dixie 2° below), ranging 17° below to 1° below.

Only 3.3 days suitable for fieldwork. Northern area farmers did not work at all. Southwestern area worked all 7.0 days. Soil moisture adequate to surplus, northern counties surplus, southern counties adequate to short. Spring wheat acreage planted 60%; barley 66%; oats 53%. Green peas planted 68%; onions 98%. Spring lambing 76% complete; calvaing 80%. Growth of winter wheat slow; plant height only about 5 in.; alfalfa 4 in.

VIRGINIA: Another wet week for State. All sections reporting rain on 6 days. Total amounts of 1.00 to 2.00 in. west and around 0.50 in. in east. Temperatures continued above seasonal normals through period. Most locations reported the highest--if not one of the top five--rainfall totals ever for April.

Topsoil moisture increased slightly, 45% adequate, 55% surplus. Days suitable for fieldwork rose to 3.4. Corn Planting still behind normal, 48% complete, 53% last year, 60% average. Soybean planting barely started, 2% complete, 6% last year, 6% average. Peanut planting reached 20% complete, 30% last year, 42% average. Tobacco plants good to excellent condition but growth slowed by cool, wet weather. Flue tobacco transplanting 3% complete, 5% last year, 10% average. Fruit prospects good to excellent with trees in full bloom. Fruit tree spraying active. Other crop activities include

harvesting rye silage, spraying for alfalfa weevil, vegetable planting, and land preparation. Hay growing slow due to wet weather, but in good condition.

WASHINGTON: Generally cool and wet for most of week as frontal systems crossing State on 1st, and 4th separated by cool, moist and unstable air. Measurable precipitation fell nearly every day west of Cascades. Cool air produced lower than normal temperatures; reading 5 to 10° below normal east of mountains. Cool wet weather during week kept many farmers out of field and continues to delay growth of most crops. Seeding of spring cereal crops continues. Field corn planting continues. Farmers preparing fields for dry beans and lima beans. Winter wheat remains in average to above average conditions.

Apples now blooming in the later districts. Apple thinning sprays still being applied. There is potential for outbreak of apple scab; some orchards and growers spraying for that disease. Blueberries continue to bloom and setting fruit. Strawberries approaching full bloom and some fields severely injured by frost. Raspberry plantings starting to bloom. Strawberry and raspberry harvests probably late this year. Planting of vegetable crops still delayed by wet weather. Green pea planting continues. Early fresh market sweet corn being seeded well-drained sites. Carrots, green beans, and broccoli also being planted; asparagus harvest continues eastern growing areas. Cold weather continues to limit growth of range and forest forage. Some disease problems experienced with new born calves this spring. Sheep being shorn, dairymen continue to green chop and put up grass silage. Winter wheat headed: 0,1984 0,1983 0 average.

WEST VIRGINIA: Temperatures were slightly above normal across the State. Above normal temperatures were experienced at the beginning of the week, with temperatures dropping to normal by week's end. Precipitation was above normal amounts, with many locations receiving 1.00 in. or more. Flat Top had the most rain during the week, 2.12 in., while Burlington received the least, 0.64 in.

Soil moisture adequate to surplue. Days suitable for fieldwork averaged 2.4. Main activities: Field preparation, planting and fencing. Feed supplies adequate to short.

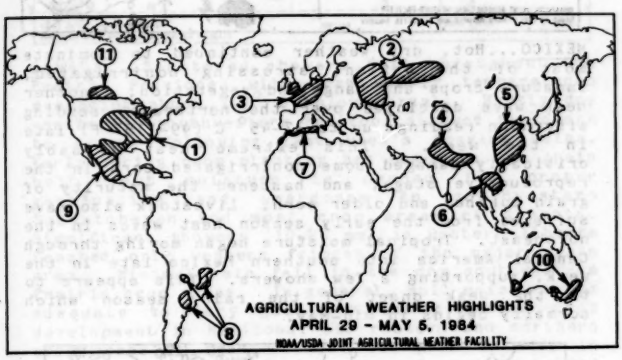
WISCONSIN: Heavy slushy snow ended in the northwest by the morning of 30th where up to 12 inches of accumulation were reported. There were scattered showers and periods of rain throughout the State everyday of the week. Strong gusty winds occurred the 30th with some reports in excess of 60 M.P.H. Highs generally averaged in the 50's and 60's, the lows averaged in the 30's, with a fairly cold period the 1st and 2nd.

Rain and snow saturated fields bringing fieldwork to a crawl. Only 1.7 days were estimated suitable for fieldwork reflected by soil moisture ratings of 0% short, 38% adequate, and 62% surplus. Corn was 3% planted compared to 1% last week, 8% last year and A 9% average. Oats were 56% planted compared to 44% last week, 56% last year and a 57% average. Potato planting was almost complete in the central sands area but wet conditions hampered progress elsewhere. Alfalfa, pasture and winter wheat reported in good shape across the State.

WYOMING: Average temperatures below normal. Few reporting stations in low sixties, but all lows well below freezing. Precipitation below normal. Topsoil moisture adequate 98% State. Days suitable for fieldwork: 2.00 Spring wheat planted, 40%; emerged, 20%. Oats planted, 35%; emerged, 15%. Sugarbeets planted, 75%; emerged, 15%. Barley planted, 55% emerged, 30%. Corn planted, 10% small amount emerged. Potatoes planted, 10%. Dry beans planted, 5%. Winter wheat fair to mostly good condition. Some winterkill in southeastern areas. Livestock losses reported as severe in northeast and north central parts of State. Sheep and lambs hit hardest, exact losses still unknown, Cattle losses fairly light; calf losses moderate to heavy. Spring calves born 80%. Farm flock: Ewes lambed, 85%; shorn, 80%. Range sheep: Ewes lambed, 40%; shorn, 50%.

International Weather and Crop Summary

April 29 to May 5



HIGHLIGHTS:

1. UNITED STATES ... Wetness over the eastern half of the Nation causes crop planting delay of up to 2 weeks in the Corn Belt, Delta, and Tennessee Valley. Unusually cool conditions in the central Plains further delay crop development. Dryness spreads eastward across the southern half of Texas stressing some crops.

2. WESTERN USSR ... Generally dry weather covers most crop areas. Subsoil moisture supplies are limited, particularly across the eastern half of the region.

3. EUROPE ... Showers from England and France through East Germany ease concern about low topsoil moisture conditions.

4. SOUTH ASIA ... Premonsoon showers in the northeast add moisture for rice planting in early June. Wheat harvesting continues with mostly dry weather.

5. EASTERN ASIA ... Rice crops continue to benefit from generous rains. Showers in the northern wheat area are beneficial but more rain is needed for nonirrigated fields.

6. SOUTHEAST ASIA ... Timely rains continue in most of Indochina. Dry weather in central Thailand is unfavorable for planting.

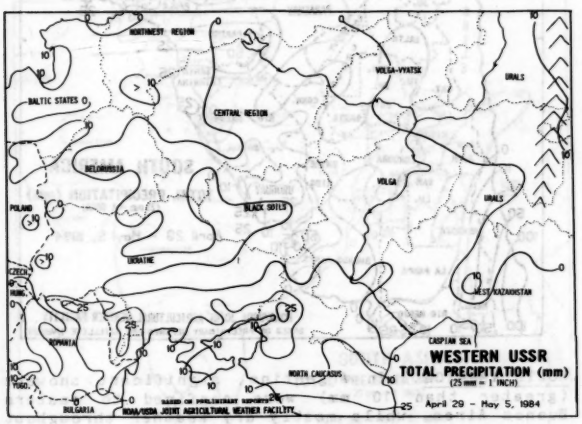
7. NORTHWESTERN AFRICA ... Widespread showers in Morocco and northwestern Algeria slow potential yield reductions. Unfavorably dry weather covers winter grains in the filling stage in Tunisia.

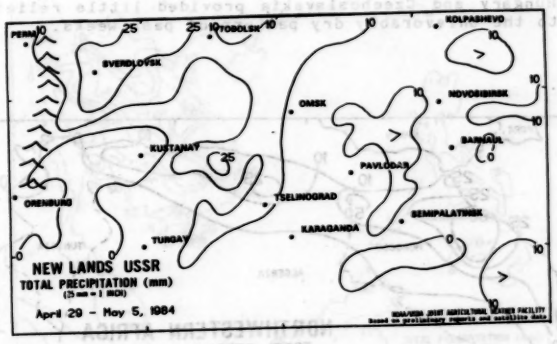
8. SOUTH AMERICA ... Mostly dry weather in Argentina aids crop harvesting. Harvesting of corn, sunflowers, and sorghum is in late stages while the soybean harvest is just underway. In Brazil, scattered rain in Rio Grande do Sul causes some local delays but the harvest pace is still ahead of average.

9. MEXICO ... Hot, dry weather continues to stress crops and livestock. A heat wave is blanketing the northeast, while the rainy season is about to begin in the south.

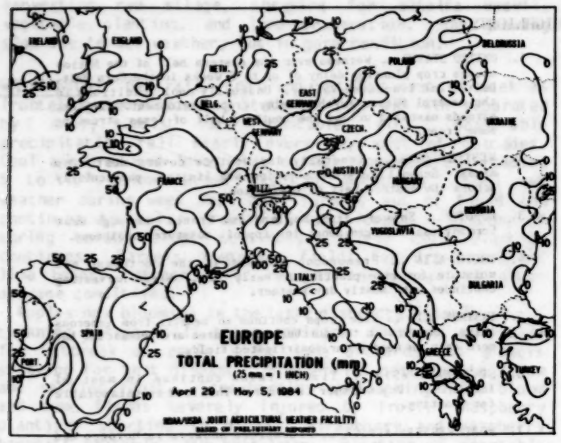
10. AUSTRALIA ... Mostly dry weather in the east aids fieldwork with winter planting to increase rapidly in the next few weeks. Showers moisten topsoils in western wheat areas.

11. CANADA ... Scattered showers and cool weather prevail over the Prairie Provinces while early planting of wheat and rapeseed is underway.

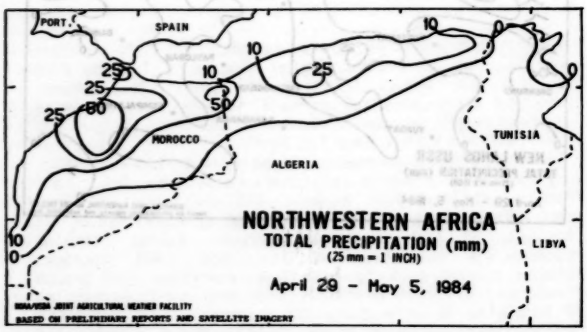




USSR...Generally dry weather covered crop areas in western USSR with temperatures rising to above normal by the end of the week. The dry weather across the region should have allowed sowing of spring crops to progress northward with minimal delays. Reports indicate spring sowing is behind the advanced pace of last year, but ahead of normal. Sowing has progressed as far north as northeast European USSR, with corn and sunflower sowing taking place throughout the Ukraine and North Caucasus. Early spring crops are emerging across the south and winter grains are in the vegetative stage. Dry weather in the Black Soils, northeastern Ukraine, northern North Caucasus, and lower Volga Valley produced potential stress conditions for both winter and emerging spring crops. Widespread showers are needed across much of European USSR for early crop growth. In the New Lands, where most of the spring wheat crop is grown, planting will not begin until after May 15. Dry weather on some days should have allowed fieldwork in preparation for planting across the region, particularly in the south. Light showers covered crop areas across the north, improving topsoil moisture conditions for planting. Weekly temperatures were below normal across the region.

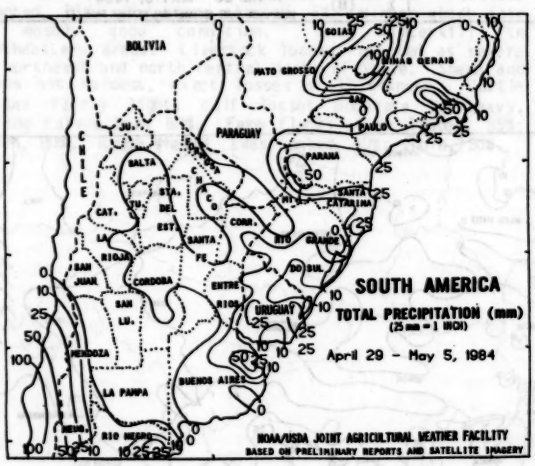


EUROPE...Light showers fell in southern England, northern France, the Netherlands, Belgium, East Germany, and West Germany easing concern about adequate topsoil moisture conditions for emergence of spring sown crops. Dry weather in these areas during recent weeks hampered emergence of some spring crops. Light showers also improved moisture conditions in western and northern Poland, but dry weather continued to prompt concern about adequate moisture conditions for winter and spring sown crops in central and southern crop areas. Widespread rains (10-25 mm) continued to benefit winter grains in Spain, maintaining favorable yield prospects. Wet weather also benefited crops in northern Italy. Generally dry weather in eastern Yugoslavia, central and southern Romania, and much of Bulgaria allowed the delayed pace of spring crop sowing to increase. Light precipitation in crop areas in Hungary and Czechoslavakia provided little relief to the unfavorably dry pattern of past weeks.

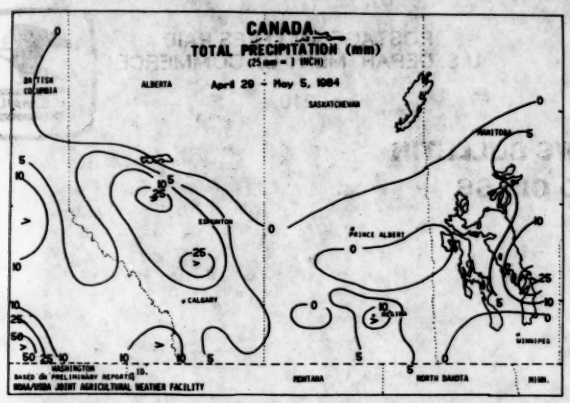

NORTHWESTERN AFRICA
TOTAL PRECIPITATION (mm)
(25 mm = 1 INCH)
April 29 - May 5, 1984
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

NORTHWESTERN AFRICA...Widespread showers around 25 mm, benefited winter grains in Morocco and northwestern Algeria, slowing the potential for yield declines. Light showers (10-25 mm) also fell on crop areas in northeastern Algeria, with mostly dry weather covering winter grains in northern Tunisia. Most winter grains across the region are in the late filling stage, and a small portion of the crop may be maturing. Weekly temperatures were below normal in Morocco and northwestern Algeria, and above normal in eastern Algeria and northern Tunisia.

MEXICO...Hot, dry weather continued to dominate most of the nation, stressing nonirrigated, immature crops and rangeland vegetation. Another heat wave developed over the northeast, sending afternoon readings up to 37-45° C (99-115° F) late in the week. This extreme heat probably critically damaged some nonirrigated corn in the reproductive stage, and hastened the maturity of grain sorghum and older corn. Livestock also have suffered from the early season heat waves in the northeast. Tropical moisture began moving through Central America into southern Mexico late in the week, supporting a few showers. This appears to be the weak onset of the rainy season which normally begins in mid-May.

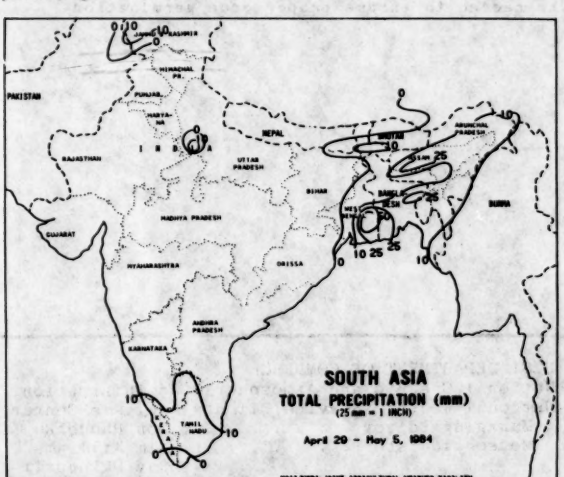


SOUTH AMERICA...In Argentina, significant showers (greater than 10 mm) were confined to eastern Buenos Aires, while mostly dry weather throughout most crop areas allowed rapid harvesting of summer crops. Corn and sunflowers were reported to be 90 to 95 percent harvested, while the sorghum harvest was 75 to 80 percent complete. Soybean harvesting is about 15 percent complete; most of the crop is now maturing. Dry weather in northern cotton areas allowed harvesting to progress rapidly. In Brazil, scattered showers and thunderstorms fell over Rio Grande do Sul causing some local delays in the soybean harvest. The harvest is about 80 percent complete in Rio Grande do Sul, which is ahead of the recent average pace. Brazil's total soybean harvest is nearly 90 percent complete, which is also somewhat ahead of average. Locally heavy rain fell in Parana early in the week. The moisture aided germination and emergence of winter wheat.

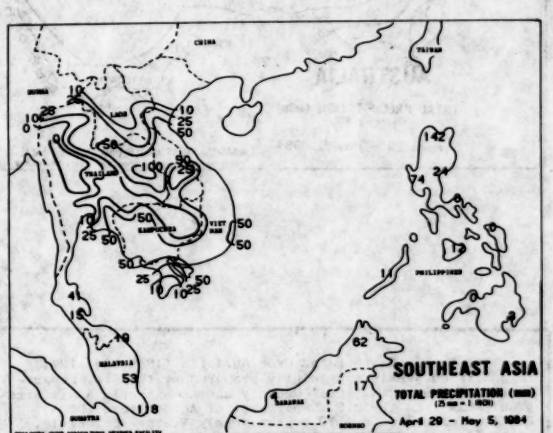


CANADA...Scattered showers fell throughout the Prairie Provinces with mean weekly temperatures averaging about 3-5° C below normal. Mostly dry weather in southwestern Manitoba allowed fieldwork to resume following last week's soaking rains. Early spring crop planting has begun in the grain belt, but moisture is needed for proper germination and emergence in southwestern Saskatchewan and most crop areas of Alberta. Significant showers (10-25 mm) in western Alberta reached only western fringes of the major grain area. Minimal rain fell in the dry southwestern Prairie crop areas. In general, soil moisture was adequate to very good for early season crop development in Manitoba, and eastern and northern crop areas of Saskatchewan, but poor to fair in the western areas. The recent cool weather helped slow weed growth while daytime temperatures were sufficiently high for some wheat and rapeseed planting.

EASTERN ASIA...Moderate to heavy rain (25-100 mm) continued in southern China. Possible localized flooding occurred in Guangxi, Guangdong, and Jiangxi where above-normal rain has fallen during the past few weeks. However, the moisture has favored rice in the area south of the Yangtze Valley. Light to moderate rain favored most of the winter wheat region. The moisture also benefited early growth of summer crops. Generally less than 10 mm of rain fell in Shandong, Hebei, and Shanxi where presistent dryness has stressed early growth of nonirrigated wheat and slowed summer crop planting. More rain would benefit northern winter wheat entering the heading stage. Temperatures averaged cooler than normal in eastern China this week slowing crop development. Light showers in Manchuria at midweek favored emerging corn and soybeans.



SOUTH ASIA...Significant premonsoon showers were limited to northeastern India. Isolated, moderate to heavy rains (25-75 mm) fell in West Bengal, Assam, and Bangladesh. The moisture continued to improve preplanting conditions. Only light showers fell in the south, relieving the flooding which occurred in Kerala last week. Most rice planting will begin with the onset of the wet season, normally in early June. Mostly dry weather in the wheat region favored harvesting which is nearing completion. Temperatures were seasonably warm in India this week.



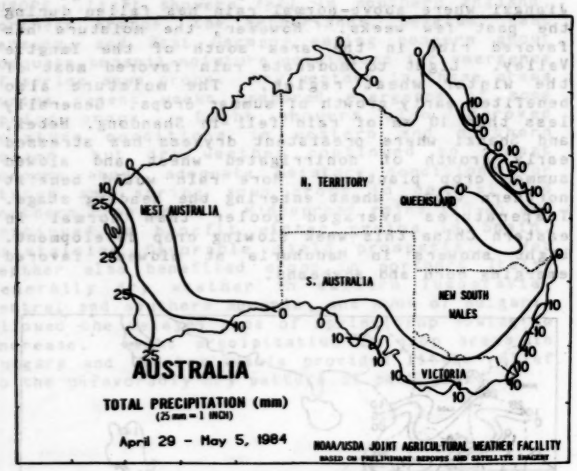
SOUTHEASTERN ASIA...Moderate to heavy rain (25-100 mm) in Indochina for the second week improved rice planting conditions. The precipitation was mostly confined to eastern Thailand, Kampuchea, Laos, and southern Vietnam. A dry pocket stretched northward through central Thailand, possibly discouraging corn planting following relatively dry weather in the area last week. Light showers continued in the west and north, where more moisture is needed for planting. Moderate precipitation in the northern Philippines continued to benefit rice planting conditions in central and southern Luzon. Lighter showers fell throughout the islands.

NOAA/USDA Joint Agricultural
Weather Facility
Room 5844 USDA South Building
Washington, D.C. 20250

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF COMMERCE
210

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

WEEKLY NEWS BULLETIN
SECOND CLASS



AUSTRALIA...Mostly dry weather covered eastern wheat areas, except for a few light showers in south-central Queensland. Very light showers (less than 5 mm) also fell in southern crop areas of Victoria and South Australia, but fieldwork progressed with little or no delay. Topsoils were moistened by widespread showers over the western wheat areas of Western Australia. Recent moisture in the west was timely for preparing the soil for wheat planting. Planting activity will increase rapidly during the next few weeks with early June often cited as the deadline for the optimal planting period. Subsoil moisture supplies are good in the east, but timely planting rains will be needed to ensure proper crop germination.

The Weekly Weather and Crop Bulletin (ISSN 0043-1974) is published weekly and jointly prepared by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) and the U.S. Department of Agriculture (USDA). Publication began in 1872 as the Weekly Weather Chronicle. It is issued under general authority of the Act of January 12, 1895 (44-USC 213), 53d Congress, 3d Session. NOAA is responsible for managing, printing, and distributing the Bulletin. The contents may be reprinted freely, with proper credit.

Annual subscriptions: domestic $25, foreign $33 (in U.S. funds by international money order or check drawn on U.S. bank), payable to U.S. Department of Commerce, NOAA. POSTMASTER: Send address changes to NOAA/USDA Joint Agricultural Weather Facility, USDA South Building, Room 5844, Washington, D.C. 20250. Order subscriptions from the office and address listed above. Second class postage paid at Washington, D.C. and additional mailing offices.

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Weather Service/Climate Analysis Center
Managing Editor . . . . . Don Haddock
Meteorologists . . . . . Jim Williams
Ray McInturff
Lyle Denny
Wes Byrd
Dan Sullivan

Subscriptions (202) 447-7917 . . Cheryl Caleco

U.S. DEPARTMENT OF AGRICULTURE
Economics Management Staff
Editor . . . . . Gloria Ruggiero
Statistical Reporting Service
Agricultural Statistician . . . Bill Brannen
World Agricultural Outlook Board
Agricultural Weather Analysts . Ray Motha
Tom Puterbaugh Ron Lundine